CPC COOPERATIVE PATENT CLASSIFICATION

A63B APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING,

CLIMBING, OR FENCING

BALL GAMES

TRAINING EQUIPMENT (apparatus for passive exercising, massage <u>A61H</u>)

WARNING

1. The following IPC groups are not used in the internal classification scheme. Subject matter covered by these groups is classified in the following CPC groups:

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A63B 7/06 covered by A63G 1/00
A63B 21/075 covered by A63B 21/072
A63B 21/08 covered by A63B 21/06
A63B 22/08 covered by A63B 22/0605 in absence of A63B 22/00 A
A63B 22/10 covered by A63B 22/0605 in combination with A63B

22/00 A
A63B 22/12 covered by A63B 22/0605 in combination with A63B

22/001
A63B 29/04 covered by A63B 29/00
A63B 31/16 covered by A63B 31/14
A63B 49/06 covered by A63B 31/14
A63B 51/16 covered by A63B 51/14
A63B 55/06 covered by A63B 55/04
A63B 63/02 covered by A63B 63/00
A63B 63/04 covered by A63B 63/00
A63B 69/22 covered by A63B 69/20
A63B 69/28 covered by A63B 69/20
A63B 69/30 covered by A63B 69/20
A63B 71/16 covered by A63B 69/20
A63B 71/16 covered by A63B 69/20
A63B 71/16 covered by A63B 69/20
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Guide heading: Gymnastic exercising apparatus (training apparatus for special sports A63B 69/00;

apparatus for passive exercising, massage A61H)

A63B 1/00 Horizontal bars

A63B 1/005 . { Safety devices for securing the rods }

A63B 1/04 . Cleaning the rods

A63B 3/00 Parallel bars or similar apparatus

A63B 4/00 Balance beams

A63B 5/00 Apparatus for jumping (mats for jumping A63B 6/00 ; for racing or riding sports, e.g.

hurdles A63K)

A63B 5/02 . High-jumping posts

A63B 5/04 ... Ropes { or similar devices } therefor

A63B 5/06	
	. Vaulting poles; { Take-off boxes therefor }
A63B 5/08	 Spring-boards (of trampoline type <u>A63B 5/11</u>; { in the form of spring mats <u>A63B 6/00</u>})
A63B 5/10	for aquatic sports
A63B 5/11	. Trampolines
A63B 5/12	Bolster vaulting apparatus, e.g. horses, bucks, tables
A63B 5/16	 Training devices for jumping Devices for balloon-jumping Jumping aids { (A63B 25/02 , A63B 25/10 take precedence) }
A63B 5/166	{ Devices for balloon-jumping }
A63B 5/20	Skipping-ropes { or similar devices rotating in a vertical plane }
A63B 5/205	{ Powered skipping rope devices }
7.002 0/200	(one of empty species)
A63B 5/22	. Foot obstacles for skipping, { e.g. horizontally-rotating obstacles }
A63B 6/00	Mate out to tile for abouting about for impring group action of the life (/ for
A03B 0/00	Mats or the like for absorbing shocks for jumping, gymnastics or the like $\{$ (for jogging on the spot A63B 69/0035; resiliently-mounted floors E04F 15/22) $\}$
A63B 6/02	• for landing, e.g. for pole vaulting { (jumping-mattresses for rescue A62B 1/22) }
A63B 6/025	{ Sand landing pits, e.g. for long jumping }
A63B 7/00	Freely-suspended gymnastic apparatus
A63B 7/02	Swinging rings Trapezes
A63B 7/02 A63B 7/04	Trapezes
A63B 7/04	Trapezes Climbing-ropes
A63B 7/04 A63B 7/045	Trapezes Climbing-ropes Using endless ropes }
A63B 7/04 A63B 7/045 A63B 7/08	Trapezes Climbing-ropes Using endless ropes } Apparatus for rope-dancing
A63B 7/04 A63B 7/045 A63B 7/08 A63B 7/085	Trapezes Climbing-ropes Using endless ropes } Apparatus for rope-dancing Balancing on a band tensioned between two anchor points, e.g. Slackline type } Climbing poles, frames, or stages { (climbing walls for mountaineering training A63B)
A63B 7/04 A63B 7/045 A63B 7/08 A63B 7/085	 Trapezes Climbing-ropes { Using endless ropes } Apparatus for rope-dancing { Balancing on a band tensioned between two anchor points, e.g. Slackline type } Climbing poles, frames, or stages { (climbing walls for mountaineering training A63B 69/0048 ; endless loop ladders A63B 22/04) }
A63B 7/04 A63B 7/045 A63B 7/08 A63B 7/085	 Trapezes Climbing-ropes { Using endless ropes } Apparatus for rope-dancing { Balancing on a band tensioned between two anchor points, e.g. Slackline type } Climbing poles, frames, or stages { (climbing walls for mountaineering training A63B 69/0048; endless loop ladders A63B 22/04) } WARNING

Documents are being reclassified to A63B 21/072

A63B 15/005	• { with a weight movable along the longitudinal axis of the club due to centrifugal forces (in tennis rackets A63B 59/0096) }
A63B 15/02	. with illuminating devices
A63B 17/00	Exercising apparatus combining several parts such as ladders, rods, beams, slides
A63B 17/02	. rigidly combined
A63B 17/04	. separable
A63B 19/00	Hoop exercising apparatus { ($\underline{A63B\ 21/0608}$ takes precedence; not driven by the user, e.g. motor driven, $\underline{A63G\ 29/00}$, $\underline{A63G\ 31/00}$) }
A63B 19/02	 Freely-movable rolling hoops, e.g. gyrowheels { or spheres or cylinders, carrying the user inside (resisting devices overcoming gyroscopic forces of rotating bodies <u>A63B</u> <u>21/22</u>; standing on it for equilibrium exercises <u>A63B 26/003</u>; spherical hulls or hulls in the shape of a vertical ring for use in water <u>B63B 1/047</u>) }
A63B 19/04	 movably supported on a framework { or spheres or cylinders carrying the user inside (standing on it for equilibrium exercises <u>A63B 26/003</u>) }
A63B 21/00	Exercising apparatus for developing or strengthening the muscles or joints of the body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor $\underline{A63B\ 24/00}$; measuring muscular strength $\underline{A61B\ 5/22}$)
A63B 21/000 A63B 21/00003	body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B
	body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22)
A63B 21/00003	body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible
A63B 21/00003 A63B 21/00007	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) }
A63B 21/00003 A63B 21/00007 A63B 21/0001	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H
A63B 21/00003 A63B 21/00007 A63B 21/0001 A63B 21/00014	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H 75/00 }
A63B 21/00003 A63B 21/00007 A63B 21/0001 A63B 21/00014 A63B 21/00018	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H 75/00 } { using special pulley-assemblies }
A63B 21/00003 A63B 21/00007 A63B 21/0001 A63B 21/00014 A63B 21/00018 A63B 21/00021	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H 75/00 } { using special pulley-assemblies } { cam-shaped pulleys or other non-uniform pulleys, e.g. conical } { the position of one (or more) pulleys being variable (e.g. for different
A63B 21/00003 A63B 21/00007 A63B 21/0001 A63B 21/00014 A63B 21/00018 A63B 21/00021 A63B 21/00025	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) . { Special force transmissions therefor } . { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H 75/00 } { using special pulley-assemblies } { cam-shaped pulleys or other non-uniform pulleys, e.g. conical } { the position of one (or more) pulleys being variable (e.g. for different exercises) }
A63B 21/00003 A63B 21/00007 A63B 21/0001 A63B 21/00014 A63B 21/00021 A63B 21/00025 A63B 21/00029	 body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor A63B 24/00; measuring muscular strength A61B 5/22) Special force transmissions therefor } { using flexible elements for reciprocating movements, e.g. ropes, chain (flexible ropes or chains for transmission between rotating axes or pulleys n.c.) } { Bowden cables, i.e. wire within a protective casing, like a bike brake cable } { wound up and unwound during exercise, e.g. from a reel, rewind reels B65H 75/00 } { using special pulley-assemblies } { cam-shaped pulleys or other non-uniform pulleys, e.g. conical } { the position of one (or more) pulleys being variable (e.g. for different exercises) } { Ratchet-wheel links; overrunning clutches, one-way clutches}

A63B 21/00043

{ exercise device consisting of a pair of interfaces with the user connected by flexible elements, e.g. two handles connected by elastic bands, skipping ropes A63B 5/20 t.p., resilient element A63B 21/02 }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00047

Exercise device not moving during use, benches A63B 21/00087 t.p., isometric exercising A63B 21/0023, step exerciser A63B 23/0458 t.p., walk exerciser A63B 23/0464 t.p.]

A63B 21/0005

. . { For head stands }

A63B 21/00054

.. { For shoulder stands }

A63B 21/00058

Mechanical means for variation of the resistance (A63B 21/06 takes precedence) }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00061

. { Replaceable resistance units of different strengths, e.g. for swapping }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00065

• { Multiple individual resistance units of the same or different strengths, e.g. additional }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00069

• { Setting, adjusting the resistance level, or compensating for a preload prior to use, e.g. changing length of resistance, adjusting a valve }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00072

... { By changing the length of a lever }

A63B 21/00076

• On the fly, i.e. the resistance being adjustable during exercise }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00079

. { details of the interface with the user related to strength training }

WARNING

not complete, pending the completion of a reclassification

A63B 21/00083 { kind of exercise interface; chairs and stools with exercising means A47C 9/002 } **WARNING** not complete, pending the completion of a reclassification A63B 21/00087 { benches specifically designed for exercising; for bench press A63B 21/078 } . . . **WARNING** not complete, pending the completion of a reclassification A63B 21/0009 { with parts of the bench moving against a resistance during exercise } **WARNING** not complete, pending the completion of a reclassification A63B 21/00094 { handle, pedal, bar or platform } **WARNING** not complete, pending the completion of a reclassification A63B 21/00098 { for manipulation by feet/foot } **WARNING** not complete, pending the completion of a reclassification A63B 21/00101 { for manipulation by hand } **WARNING** not complete, pending the completion of a reclassification A63B 21/00105 { exercise mats with or without hand or foot grips for personal use, e.g. for Yoga or supine floor exercises; mats for absorbing shocks A63B 6/00 t.p. } **WARNING** not complete, pending the completion of a reclassification A63B 21/00109 N: contoured to fit to specific body parts e.g. back, knee or neck support attachment on user's body A63B 21/00138 t.p. handles, pedals, bar or platfrom A63B 21/00094 t.p.] **WARNING** not complete, pending the completion of a reclassification A63B 21/00112 { movement of the interface }

WARNING

	not complete, pending the completion of a reclassification
A63B 21/00116	 { free movement, unrestricted apart from by the resistance; $\underline{A63B\ 21/072}\ t.p.;$ $\underline{A63B\ 21/32}\ t.p$ }
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/0012	 { reciprocating movement of the interface along (in/on) a guide, weights moving along or in guiding means $\underline{A63B\ 21/06}$, for cardio-training $\underline{A63B\ 22/201}$ }
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/00123	 { pivoting movement of the interface, weight pivoting A63B 21/08 }
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/00127	 { the interface rotating about an axis }
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/0013	 direct manipulation of the resistance, dumb bells, bar bells or the like $\underline{\text{A63B 21/072}}$ t.p.]
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/00134	 { resisting device worn on the body; weights worn on user's body A63B 21/065 t.p. }
A63B 21/00138	 { Attachments of exercising apparatus to the body of the user, e.g. using special belts, shoes or gloves, weights worn on user's body A63B 21/065 t.p., exoskeletons B25J 9/0006 }
A63B 21/00141	 { to the head, neck }
A63B 21/00145	 { to the shoulder }
A63B 21/00149	 { to the chest region, including back }
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/00152	 { to the waist }
A63B 21/00156	 { to the lower limbs, means for physically limiting movements of body parts A63B 69/0053 }
A63B 21/0016	 { to the ankle }

WARNING

not complete,	pending th	e completion	of a	reclassification

A63B 21/00163	{ to the feet }
A63B 21/00167	<pre>{ to the upper limbs }</pre>
	WARNING
	not complete, pending the completion of a reclassification
A63B 21/0017	<pre>{ to the wrist }</pre>
	WARNING
	not complete, pending the completion of a reclassification, check <u>A63B</u> <u>21/00167</u>
A63B 21/00174	<pre>{ to the hand }</pre>
	WARNING
	not complete, pending the completion of a reclassification, check $\underline{\text{A63B}}$ $\underline{\text{21/00167}}$
A63B 21/00178	{ Apparatus for active exercising which can be used also for passive exercising }
A63B 21/00181	• { Apparatus comprising additional means assisting the user to overcome part of the resisting force, i.e. assisted-active exercising }
A63B 21/00185	• { Resistance force provided by the user himself, e.g. exercising one body part against a resistance provided by another body part (<u>A63B 21/068</u> takes precedence; isometric exercise <u>A63B 21/0023</u>) }
A63B 21/00189	 { Resistance provided by deformable materials having no elasticity, e.g. lead bars, kneadable masses }
A63B 21/00192	. { Resistance force provided by magnetic means (<u>A63B 21/005</u> takes precedence) }
A63B 21/00196	• { Pulsed counterforce; e.g. vibrating resistance means (<u>A61H 1/005</u> takes precedence) }
A63B 21/002	 isometric or isokinetic, i.e. substantial force variation without substantial muscle motion { or wherein the speed of the motion is independent of the force applied by the user }
A63B 21/0023	{ Apparatus for isometric exercising only, e.i. without substantial motion by substantial force application }
A63B 21/005	using electromagnetic or electric force-resisters
A63B 21/0051	{ using eddy-currents induced in moved elements, e.g. by permanent magnets }
A63B 21/0052	{ induced by electromagnets (A63B 21/0056 takes precedence) }

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A63B 21/0053
                             { using an alternator or a dynamo }
A63B 21/0056
                             { using electromagnetically-controlled friction, e.g. magnetic particle brakes }
                      . .
A63B 21/0057
                             { using electromagnetic clutches }
A63B 21/0058
                             { using a motor }
A63B 21/008
                         using hydraulic or pneumatic force-resisters { not used, see subgroups }
A63B 21/0081
                             { using hydraulic force-resisters }
A63B 21/0083
                                { of the piston-cylinder type ( shock absorbers in general <u>F16F 9/00</u> ) }
A63B 21/0084
                                { by moving the ambient water ( A63B 31/00 , A63B 35/00 take precedence ) }
A63B 21/0085
                             { using pneumatic force-resisters }
                      . .
A63B 21/0087
                                { of the piston-cylinder type }
A63B 21/0088
                                { by moving the ambient air }
A63B 21/012
                         using frictional force-resisters { (electromagnetically-controlled brakes A63B 21/0056)
A63B 21/0125
                             { with surfaces rolling against each other without substantial slip }
A63B 21/015
                             including rotating or oscillating elements { rubbing against fixed elements }
A63B 21/018
                             including a rope { or other flexible element } moving relative to the surface of
                             elements
A63B 21/02
                         using resilient force-resisters
A63B 21/023
                             { Wound springs }
A63B 21/025
                                { Spiral springs with turns lying substantially in plane surfaces }
A63B 21/026
                             { Bars; Tubes; Leaves ( A63B 21/023 takes precedence ) }
A63B 21/027
                                { Apparatus forced to oscillate at its resonant frequency }
A63B 21/028
                             { made of material having high internal friction, e.g. rubber, plastic, steel wool, used
                             for compression }
A63B 21/04
                             attached to static foundation
A63B 21/0407
                                { Anchored at two end points, e.g. installed within an apparatus }
A63B 21/0414
                                   { With both ends stationary during the actual exercise, i.e. force applied at an
                                   intermediate location }
A63B 21/0421
                                   { Ends moving relatively by a pivoting arrangement }
A63B 21/0428
                                   { the ends moving relatively by linear reciprocation }
A63B 21/0435
                                   { One or both ends anchored to a rotating element }
A63B 21/0442
                                { Anchored at one end only, the other end manipulated by the user }
A63B 21/045
                             having torsion { or bending, flexion } element
A63B 21/0455
                                { having torsion element around its longitudinal axis }
                      . . .
A63B 21/05
                             Linearly-compressed elements { ( A63B 21/028 takes precedence ) }
A63B 21/055
                             extension element type
A63B 21/0552
                                { Elastic ropes or bands }
                      . . .
A63B 21/0555
                                   { Details of the rope or band itself, e.g. form, construction, colour coding,
                      . . . .
                                   protection coating }
A63B 21/0557
                                   { Details of attachments, e.g. to other parts, i.e. clips, clamps }
A63B 21/06
                         User-manipulated weights
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A63B 21/0601
                            { Special physical structures of used masses }
A63B 21/0602
                               { Fluids, e.g. water }
                      . . .
A63B 21/0603
                               { Fluid-like particles, e.g. gun shot, sand }
A63B 21/0604
                               { Aggregate, e.g. concrete }
A63B 21/0605
                               { With boxes, baskets or the like for stacking loose weights therein }
A63B 21/0606
                               { Buoyant volumes to be submerged }
A63B 21/0607
                               { Synthetic, e.g. elastomers }
                      . . .
A63B 21/0608
                            { Eccentric weights put into orbital motion by nutating movement of the user }
A63B 21/0609
                            { Loosely interconnected, giving progressively changing weight, e.g. heavy chains }
A63B 21/0611
                            { to be launched or thrown along guiding means against gravity forces }
A63B 21/0613
                               { by moving the guiding means }
                      . . .
A63B 21/0615
                            { the weight pivoting about a fixed horizontal fulcrum }
                      . .
A63B 21/0618
                            { Weights moving upon a horizontal plane without substantial friction, e.g. on
                            wheels, i.e. using inertial forces }
A63B 21/062
                            including guide for vertical array of weights
A63B 21/065
                            worn on user's body
A63B 21/068
                            using user's body weight
A63B 21/072
                            Dumb-bells, bar-bells or the like, { also other free movable weights, e.g. weight
                            discs having an integral peripheral handle }
                            WARNING
                                  not complete, see also A63B 11/00, A63B 13/00, A63B 15/00
A63B 21/0724
                               { Bar-bells; Hand bars }
                               { Dumb bells, i.e. with a central bar, for being held by a single hand, with
A63B 21/0726
                               weights at the ends }
A63B 21/0728
                               { Means for fixing weights on bars }
A63B 21/075
                               with variable weights
A63B 21/078
                            Devices for bench press exercises; { Supports, guiding means, drop-limiting means
                      . .
                            for bar-bells, combined or not combined with benches }
A63B 21/08
                         anchored at one end
A63B 21/14
                      • { Details of the interface with the user related to strength training }
                         WARNING
                               This group and its subgroups are not complete pending the completion of a
                               reclassification; see also the other subgroups of A63B 21/00
A63B 21/1403
                            { Attachments of exercising apparatus to the body of the user, e.g. using special
                            belts, shoes or gloves ( A63B 21/065 takes precedence, Exoskeletons B25J
                            9/0006)
A63B 21/1407
                               { to the head, neck }
A63B 21/1411
                               { to the shoulder }
A63B 21/1415
                               { to the chest region, including back }
                      . . .
A63B 21/1419
                               { to the waist }
                      . . .
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A63B 21/1423
                               { to the lower limbs ( means for physically limiting movements of body parts
                      . . .
                               A63B 69/0053)}
A63B 21/1426
                                  { to the ankle }
A63B 21/143
                                  { to the feet }
A63B 21/1434
                               { to the upper limbs }
A63B 21/1438
                                  { To the hand }
A63B 21/1442
                                  { To the wrist }
A63B 21/1446
                            { Direct manipulation of the resistance } ( A63B 21/072 takes precedence )
A63B 21/1449
                               { Resisting device worn on the body ( A63B 21/065 takes precedence ) }
A63B 21/1453
                            { Kind of exercise interface (chairs and stools with exercising means A47C 9/002)
A63B 21/1457
                               { Benches specifically designed for exercising (for bench press A63B 21/078 ) }
A63B 21/1461
                                  { With parts of the bench moving against a resistance during exercise }
A63B 21/1465
                               { Handle, pedal, bar or platform }
A63B 21/1469
                                  { For manipulation by hand }
A63B 21/1473
                               { Exercise mats with or without hand or foot grips for personal use, e.g. for Yoga
                               or supine floor exercises ( A63B 6/00 takes precedence ) }
A63B 21/1476
                               { Contoured to fit to specific body parts; e.g. back, knee or neck support ( A63B
                               21/1403, A63B 21/1465 take precedence)}
A63B 21/148
                            { Movement of the interface }
A63B 21/1484
                               { Free movement, unrestricted apart from by the resistance (A63B 21/00043,
                               A63B 21/072 take precedence ) }
A63B 21/1488
                               { Reciprocating movement of the interface along, in or on a guide ( weights
                               moving along or in guiding means A63B 21/06, for cardio-training A63B 22/201
                               ) }
A63B 21/1492
                               { Pivoting movement of the interface ( weight pivoting A63B 21/08 ) }
A63B 21/1496
                               { the interface rotating about an axis }
A63B 21/15
                         { Special force transmissions therefor }
A63B 21/151
                            { Using flexible elements for reciprocating movements, e.g. ropes, chain }
A63B 21/152
                               { Bowden cables, i.e. wire within a protective casing, like a bike brake cable }
A63B 21/153
                               { Wound up and unwound during exercise, e.g. from a reel ( rewind reels B65H
                      . . .
                               <u>75/00</u>)
A63B 21/154
                               { Using special pulley-assemblies }
A63B 21/155
                                  { Cam-shaped pulleys or other non-uniform pulleys, e.g. conical }
A63B 21/156
                                  { the position of one or more pulleys being variable, e.g. for different
                                  exercises }
A63B 21/157
                            { Ratchet-wheel links; Overrunning clutches , One-way clutches }
A63B 21/158
                            { Hydraulic transmissions (hydraulic resistance A63B 21/0081)}
A63B 21/159
                            { Using levers for transmitting forces }
A63B 21/16
                         Supports for anchoring force-resisters
A63B 21/1618
                            { not used, see subgroups and A63B 21/16 }
A63B 21/1627
                               { on or between the vertical posts of a door frame }
A63B 21/1636
                               { on the horizontal part of a door frame }
                      . . .
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A63B 21/1645
                               { on a door }
                      . . .
A63B 21/1654
                               { clamped between door and floor }
A63B 21/1663
                               { clamped between door and door frame }
A63B 21/1681
                            { mounted between horizontal surfaces, e.g. floor and ceiling }
A63B 21/22
                         Resisting devices with rotary bodies, { e.g. by overcoming gyroscopic forces ( A63B
                         21/0608 takes precedence)}
A63B 21/225
                            { with flywheels }
A63B 21/227
                               { with alternate changes of rotational sense }
A63B 21/28
                         Devices for two persons operating in opposition
A63B 21/285
                            { in cooperation }
A63B 22/00
                      Exercising apparatus specially adapted for conditioning the cardio-vascular
                      system, for training agility or co-ordination of movements (force-resisting aspects
                      A63B 21/00; { for particular parts of the body, e.g. to strengthen particular limbs or
                      muscles A63B 23/00; } electric or electronic controls therefor A63B 24/00)
                      NOTE
                           In this subclass, multi-aspect classification is applied, so that subject matter
                           characterised by aspects covered by more than one of its groups, which is
                           considered to represent information of interest for search, may also be classified in
                           each of those groups.
                      . { involving an exercising of arms ( for strengthening the upper limbs A63B 23/12 ) }
A63B 22/0002
A63B 22/0007
                            { by alternatively exercising arms or legs, e.g. with a single set of support elements
                            driven either by the upper or the lower limbs }
A63B 22/001
                            { by simultaneously exercising arms and legs, e.g. diagonally in anti-phase ( A63B
                            22/0076 takes precedence)}
A63B 22/0012
                               { the exercises for arms and legs being functionally independent }
A63B 22/0015
                        { with an adjustable movement path of the support elements }
                            { the inclination of the main axis of the movement path being adjustable, e.g. the
A63B 22/0023
                            inclination of an endless band }
A63B 22/0046
                        { Details of the support elements or their connection to the exercising apparatus, e.g.
                         adjustment of size or orientation (attachments of resisters or weights to the body of
                         the user A63B 21/12; using rollers, wheels, castors or gliding means to be moved
                         over the floor or guide tracks A63B 22/20)
A63B 22/0048
                         { with cantilevered support elements pivoting about an axis ( A63B 22/0076 takes
                         precedence ) }
                            { the pivoting movement being in a vertical plane, e.g. steppers with a horizontal
A63B 22/0056
                            axis (platforms for rocking motion about a horizontal axis A63B 22/16)
A63B 22/0058
                               { the vertical plane being the frontal body-plane }
                            { the pivoting movement being in a horizontal plane, e.g. skating movement (
A63B 22/0061
                            platforms for reciprocating rotating motion about a vertical axis A63B 22/14)
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{ the pivoting movement being in a plane inclined with respect to the horizontal

A63B 22/0064

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plane, e.g. a step and twist movement }
A63B 22/0069
                                { about an axis inclined with respect to the horizontal plane, e.g. steppers with
                      . . .
                                an inclined axis }
A63B 22/0076
                         Rowing machines (seats moving during exercise A63B 22/0087; training appliances
                         for rowing or sculling on boats A63B 69/06)
A63B 22/0087
                        { with a seat or torso support moving during the exercise, e.g. reformers ( A63B
                         22/0076 takes precedence)}
A63B 22/0089
                             { a counterforce being provided to the support (force-resisting aspects A23B 21/00
                             ) }
A63B 22/02
                         with movable endless bands { ( e.g. treadmills, other training appliances for running on
                         the spot A63B 69/0028)}
A63B 22/0235
                            { driven by a motor }
A63B 22/0242
                               { with speed variation }
A63B 22/0257
                                   { Mechanical systems therefor }
A63B 22/0285
                            { Physical characteristics of the belt, e.g. material, surface, indicia }
A63B 22/04
                         with movable { multiple } steps, { i.e. more than one step per limb, e.g. steps mounted
                         on endless loops, endless ladders ( steppers with cantilevered support elements
                         pivoting about an axis A63B 22/0048)
                         with { support elements performing a } rotating cycling movement, { i.e. a closed path
A63B 22/06
                         movement } ( support stands for bicycles A63B 69/16; unicycles B62K 1/00 )
A63B 22/0605
                             { performing a circular movement, e.g. ergometers }
A63B 22/0664
                            { performing an elliptic movement }
A63B 22/0694
                            { without integral seat, e.g. portable mini ergometers being placed in front of a
                            chair, on a table or on a bed }
A63B 22/08
                            for the legs, { i.e. only for the legs }
A63B 22/14
                         Platforms for reciprocating rotating motion about a vertical axis { e.g. axis through the
                         middle of the platform }
A63B 22/16
                         Platforms for rocking motion about a horizontal axis { e.g. axis through the middle of
                         the platform }
                         Balancing drums
                         Balancing boards or the like { ( exercising apparatus with cantilevered support
                         elements pivoting about an axis A63B 22/0056; other exercising apparatus for
                         improving balance A63B 26/003)}
A63B 22/18
                         with elements, { i.e. platforms, } having a circulating, { nutating } or rotating movement,
                         generated by oscillating movement of the user, { e.g. platforms wobbling on a centrally
                         arranged spherical support \ ( hoop exercising apparatus A63B 19/00 ; \ eccentric
                         weights put into orbital motion by nutating movement of the user A63B 21/0608; pots
                         rotating or rocking by moving the whole body A63G 23/00 })
A63B 22/20
                         using rollers, wheels, castors or the like, { e.g. gliding means, } to be moved over the
                         floor or other surface, { e.g. guide tracks, } during exercising
A63B 22/201
                             { for moving a support element in reciprocating translation, e.g. for sliding back and
                             forth on a guide track }
A63B 22/203
                                { in a horizontal plane }
                      . . .
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A63B 22/205	{ in a substantially vertical plane, e.g. for exercising against gravity (exercising for developing or strengthening the muscles or joints of the body by working against a user's body weight A63B 21/068; with adjustable inclination A63B 22/0023)}
A63B 22/208	{ On a track which is itself moving during exercise }
A63B 23/00	Exercising apparatus specially adapted for particular parts of the body ($\underline{A63B\ 22/00}$ takes precedence; force-resisting aspects $\underline{A63B\ 21/00}$; electric or electronic controls therefor $\underline{A63B\ 24/00}$; devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards $\underline{G09B\ 15/06}$)
A63B 23/02	 for the abdomen, the spinal column or the torso { muscles related to shoulders (e.g. chest muscles) A63B 23/12 t.p.; exercising belts without indicating means A63B 21/26 }
A63B 23/0205	{ Abdomen }
A63B 23/0211	{ moving torso with immobilized lower limbs }
A63B 23/0216	{ moving lower limbs with immobilized torso }
A63B 23/0222	{ moving torso and lower limbs }
A63B 23/0227	{ moving torso or lower limbs laterally, i.e. substantially in the frontal plane }
A63B 23/0233	{ Muscles of the back, e.g. by an extension of the body against a resistance, reverse crunch }
A63B 23/0238	{ Spinal column (for the neck A63B 23/025) }
A63B 23/0244	{ with signalling or indicating means, e.g. of incorrect posture, for deep-breathing exercises }
A63B 23/025	. for the head or the neck
A63B 23/03	for face muscles
A63B 23/032	{ for insertion in the mouth }
A63B 23/035	. for limbs, i.e. upper or lower limbs, e.g. simultaneously
A63B 23/03508	{ For a single arm or leg, (A63B 21/0726 takes precedence) }
	WARNING
	not complete, pending the completion of a reclassification
A63B 23/03516	{ For both arms together or both legs together; Aspects related to the co-ordination between right and left side limbs of a user }
A63B 23/03525	{ Supports for both feet or both hands performing simultaneously the same movement, e.g. single pedal or single handle (<u>A63B 21/0724</u> takes precedence) }
A63B 23/03533	{ With separate means driven by each limb, i.e. performing different movements }
A63B 23/03541	{ Moving independently from each other (<u>A63B 2022/0038</u> takes precedence) }
A63B 23/0355	{ A single apparatus used for either upper or lower limbs, i.e. with a set of support elements driven either by the upper or the lower limb or limbs }
A63B 23/03558	{ Compound apparatus having multiple stations allowing an user to exercise different limbs }

A63B 23/03566		{ the multiple stations having a common resistance device }
A63B 23/03575		{ Apparatus used for exercising upper and lower limbs simultaneously }
A63B 23/03583	• • • •	{ Upper and lower limbs acting simultaneously on the same operating rigid member }
A63B 23/03591		{ Upper and lower limb moving in phase, i.e. right foot moving in the same direction as the right hand }
A63B 23/04		for lower limbs { (Training appliances for special sports $\underline{A63B\ 69/00}$; For the purpose of producing mechanical power $\underline{F03G\ 5/00}$) }
A63B 23/0405	• • • •	{ involving a bending of the knee and hip joints simultaneously ($\underline{A63B\ 23/0476}$ takes precedence) }
A63B 23/0417		{ with guided foot supports moving parallel to the body-symmetrical-plane by translation }
A63B 23/0423		{ with guided foot supports moving parallel to the body-symmetrical-plane, one end executing a complete circular movement, the other end translating almost linearly, e.g. giving an elliptical movement to the foot }
A63B 23/0429		{ with guided foot supports moving parallel to the body-symmetrical-plane by being cantilevered about a horizontal axis }
A63B 23/0458		{ Step exercisers without moving parts (with movable steps A63B 22/04) }
A63B 23/0464		{ Walk exercisers without moving parts (with movable endless bands $\underline{A63B}$ $\underline{22/02}$) }
A63B 23/047		{ Walking and pulling or pushing a load (for exercising the player ability for rugby or American football $\underline{A63B\ 69/345}$) }
A63B 23/0476		{ by rotating cycling movement (arrangements on or for real bicycles $\underline{A63B}$ $\underline{69/16}$) }
		WARNING
		WARNING Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06
A63B 23/0482		Group 23/04C is no longer used for classification. Documents are in the
A63B 23/0482 A63B 23/0488		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B
		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) }
A63B 23/0488		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take
A63B 23/0488 A63B 23/0494		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) }
A63B 23/0488 A63B 23/0494 A63B 23/08		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the
A63B 23/0488 A63B 23/0494 A63B 23/08 A63B 23/085		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane }
A63B 23/0488 A63B 23/0494 A63B 23/08 A63B 23/085 A63B 23/10		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane } for feet or toes for upper limbs { or related muscles, e.g. chest, upper back or shoulder muscles (
A63B 23/0488 A63B 23/0494 A63B 23/08 A63B 23/085 A63B 23/10 A63B 23/12		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane } for feet or toes for upper limbs { or related muscles, e.g. chest, upper back or shoulder muscles (bench press exercises A63B 21/078 ; for teaching music G09B 15/06) }
A63B 23/0488 A63B 23/0494 A63B 23/08 A63B 23/085 A63B 23/10 A63B 23/12		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane } for feet or toes for upper limbs { or related muscles, e.g. chest, upper back or shoulder muscles (bench press exercises A63B 21/078 ; for teaching music G09B 15/06) } { Involving a bending of elbow and shoulder joints simultaneously }
A63B 23/0488 A63B 23/0494 A63B 23/08 A63B 23/085 A63B 23/10 A63B 23/12		Group 23/04C is no longer used for classification. Documents are in the process of being reorganised to group A63B 22/06 { primarily by articulating the hip joints (A63B 23/0211 , A63B 23/0405 , A63B 23/0476 take precedence) } { by spreading the legs } { primarily by articulating the knee joints (A63B 23/0405 , A63B 23/0476 take precedence) } for ankle joints { by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane } for feet or toes for upper limbs { or related muscles, e.g. chest, upper back or shoulder muscles (bench press exercises A63B 21/078 ; for teaching music G09B 15/06) } { Involving a bending of elbow and shoulder joints simultaneously }

A63B 23/1236	{ Push-ups in horizontal position, i.e. eccentric movement }
A63B 23/1245	{ Primarily by articulating the shoulder joint (<u>A63B 23/129</u> takes precedence) }
A63B 23/1254	{ Rotation about an axis parallel to the longitudinal axis of the body, e.g. butterfly-type exercises }
A63B 23/1263	{ Rotation about an axis passing through both shoulders, e.g. cross-country skiing-type arm movements }
A63B 23/1272	{ Rotation around an axis perpendicular to the frontal body-plane of the user, i.e. moving the arms in the plane of the body, to and from the sides of the body }
A63B 23/1281	{ primarily by articulating the elbow joint }
A63B 23/129	{ for arm wrestling }
A63B 23/14	for wrist joints
A63B 23/16	for hands or fingers { (for teaching typing G09B 13/00) }
A63B 23/18	. for improving respiratory function
A63B 23/185	{ Rhythm indicators }
A63B 23/20	. for vaginal muscles { or other sphincter-type muscles }
A63B 24/00	Electric or electronic controls for exercising apparatus of preceding groups; { Controlling or monitoring of exercises, sportive games, training or athletic performances }
A63B 24/0003	• { Analysing the course of a movement or motion sequences during an exercise or trainings sequence, e.g. swing for golf or tennis }
A63B 24/0006	• Computerised comparison for qualitative assessment of motion sequences or the course of a movement }
A63B 24/0021	. { Tracking a path or terminating locations }
A63B 24/0059	. { Exercising apparatus with reward systems }
A63B 24/0062	• { Monitoring athletic performances, e.g. for determining the work of a user on an exercise apparatus, the completed jogging or cycling distance }
A63B 24/0075	• { Means for generating exercise programs or schemes, e.g. computerized virtual trainer, e.g. using expert databases }
A63B 24/0084	. { Exercising apparatus with means for competitions, e.g. virtual races }
A63B 24/0087	• { Electric or electronic controls for exercising apparatus of groups A63B 21/00 - A63B 23/00 , e.g. controlling load }
A63B 25/00	Stilts or the like
A63B 25/02	. Elastic stilts { (devices for balloon jumping A63B 5/166) }
A63B 25/04	. with wheels
A63B 25/06	. Shoes formed with stilts to elongate the step

Hopping-sticks, e.g. pogo sticks; { Hopping apparatus with a single resilient support (A63B 25/08 devices for balloon jumping A63B 5/166) A63B 25/10 Elastic bouncing shoes fastened to the foot A63B 26/00 Exercising apparatus not covered by groups A63B 1/00 to A63B 25/00 { for improving balance or equilibrium (balance beams A63B 4/00 ; apparatus for rope A63B 26/003 dancing A63B 7/08; balancing drums, balancing boards or the like A63B 22/16) **Guide heading:** Climbing Mountaineering Apparatus for climbing poles, trees, or the like ({ ropes A63B 29/02 } ; safety belts for A63B 27/00 climbers A62B 35/00; { climbing irons permanently attached to fixed structures E06C 9/04 }) A63B 27/02 Climbing devices for round poles { or trees } attachable to the feet A63B 27/04 Climbing devices for profile poles attachable to the feet A63B 29/00 Apparatus for mountaineering (helmets A42B 3/00; non-skid devices or attachments for footwear, e.g. mountain climbing irons A43C 15/00; breathing masks or helmets for use at high altitudes A62B 18/00; { safety belts or body harnesses A62B 35/00 }; picks B25D 7/00) A63B 29/02 Mountain guy-ropes or accessories, e.g. avalanche ropes { (hooks, e.g. snaphooks, therefor F16B 45/00) } Means for indicating the location of accidentally buried, e.g. snow-buried, persons (detecting hidden masses in general G01V) **NOTE** Contrary to the wording of group A63B 29/02, devices for lowering persons are classified in A62B 1/06 { Means for indicating the location of accidentally buried, e.g. snow-buried, persons A63B 29/021 . . (detecting hidden masses in general G01V) } A63B 29/024 { Climbing chocks } A63B 29/025 Ice screws A63B 29/027 { Pitons } A63B 29/028 { Ropes specially adapted for mountaineering } . Hand equipment for climbers A63B 29/08

Guide heading:

Swimming

A63B 31/00	Swimming aids (teaching swimming $\underline{A63B\ 69/10}$ to $\underline{A63B\ 69/14}$; life-saving in water, { e.g. life-buoys, life-belts } , $\underline{B63C\ 9/00}$)
A63B 31/02	. Swimming gloves
A63B 31/04	with arrangements for enlarging the propulsive surface
A63B 31/08	. Swim fins, flippers or other swimming aids held by, or attachable to, the hands, arms, feet or legs (A63B 31/18 takes precedence; worn as gloves A63B 31/02)
A63B 31/10	held by, or attachable to, the hands or feet
A63B 31/11	attachable only to the feet
A63B 31/12	held by, or attachable to, the arms or legs
A63B 31/14	with valve-flaps
A63B 31/18	. Swimming appliances with propulsive effect for hands and feet simultaneously
A63B 33/00	Swimming equipment attachable to the head, e.g. swim caps or goggles (diving masks $\underline{\sf B63C\ 11/12}$; breathing aids, e.g. snorkels, $\underline{\sf B63C\ 11/18}$)
A63B 33/002	. { Swimming goggles (with means covering the nostrils <u>B63C 11/12</u>) }
A63B 35/00	Swimming framework, { i.e. apparatus fixed to or held by the swimmer or diver } , with driving mechanisms operated by the swimmer or by a motor (other vessels or like floating structures for pleasure or sport $\underline{B63B\ 35/71}$, $\underline{B63B\ 35/73}$; divers` sleds or like craft $\underline{B63C\ 11/46}$)
	NOTE
	References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:
	Effecting propulsion of vessels by muscle power <u>B63H 16/00</u>
A63B 35/02	. shaped like a fish tail
A63B 35/04	. with paddle wheels
A63B 35/06	. with twin-bladed paddles or buoyant members
A63B 35/08	. with propeller propulsion
A63B 35/10	operated by the swimmer
A63B 35/12	operated by a motor
A63B 35/125	{ the motor being driven by compressed air carried by the swimmer }

Guide heading:

Balls

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A63B 37/00
                      Solid balls; { Rigid hollow balls }
                      Marbles (heavy throwing balls A63B 65/06)
A63B 37/0001
                     . { Balls with finger holes, e.g. for bowling }
A63B 37/0002
                            { Arrangements for adjusting, improving or measuring the grip, i.e location, size,
                            orientation or the like of finger holes }
A63B 37/0003
                      • { Golf balls (for practising drives A63B 69/3655, for practising puts A63B 69/3688) }
                         WARNING
                              Subgroups of A63B 37/0003 are not complete pending reclassification; see also
                              this group
A63B 37/0004
                            { Surface depressions or protrusions }
A63B 37/0005
                               { Protrusions }
A63B 37/0006
                               { Arrangement or layout of dimples }
A63B 37/0007
                               { Non-circular dimples }
A63B 37/0008
                                  { Elliptical }
A63B 37/0009
                                  { Polygonal }
A63B 37/001
                                  { Annular }
A63B 37/0011
                                  { Grooves or lines }
A63B 37/0012
                               { Dimple profile, i.e. cross-sectional view }
A63B 37/0013
                                  { The dimple being formed in both the cover and the underlying layer }
A63B 37/0015
                                  { with sub-dimples formed within main dimples }
A63B 37/0016
                               { Specified individual dimple volume }
A63B 37/0017
                               { Specified total dimple volume }
A63B 37/0018
                               { Specified number of dimples }
A63B 37/0019
                               { Specified dimple depth }
A63B 37/002
                               { Specified dimple diameter }
A63B 37/0021
                               { Occupation ratio, i.e. percentage surface occupied by dimples }
A63B 37/0022
                            { Coatings, markings ( methods for marking A63B 45/02 ) }
A63B 37/0023
                            { Covers }
A63B 37/0024
                               { Materials other than ionomers or polyurethane }
A63B 37/0025
                                  { Gutta-percha }
A63B 37/0026
                                  { Balata }
A63B 37/0027
                                  { Polyurea }
A63B 37/0029
                               { Physical properties }
A63B 37/003
                                  { Coefficient of restitution }
A63B 37/0031
                                  { Hardness }
A63B 37/0032
                                     { Hardness gradient }
A63B 37/0033
                                  { Thickness }
A63B 37/0034
                                  { Deflection or compression }
A63B 37/0035
                                  { Density; Specific gravity }
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A63B 37/0036
                                   { Melt flow rate (MFR) }
A63B 37/0037
                                   { Flexural modulus; Bending stiffness }
A63B 37/0038
                            { Intermediate layers, e.g. inner cover, outer core, mantle }
A63B 37/0039
                               { Special materials }
A63B 37/004
                               { Physical properties }
A63B 37/0041
                                   { Coefficient of restitution }
A63B 37/0043
                                  { Hardness }
A63B 37/0044
                                      { Hardness gradient }
A63B 37/0045
                                   { Thickness }
A63B 37/0046
                                   { Deflection or compression }
A63B 37/0047
                                   { Density; Specific gravity }
A63B 37/0048
                                   { Melt flow rate (MFR) }
A63B 37/0049
                                   { Flexural modulus; Bending stiffness }
A63B 37/005
A63B 37/0051
                               { Special materials other than polybutadienes; Special construction }
A63B 37/0052
                                   { Liquid cores }
A63B 37/0053
                                   { Thread wound }
A63B 37/0054
                                   { Substantially rigid, e.g. metal }
A63B 37/0055
                                   { with non-spherical insert(s) }
A63B 37/0056
                                   { Hollow; Gas-filled }
A63B 37/0058
                                   { Polyurethane }
A63B 37/0059
                                   { Ionomer }
A63B 37/006
                               { Physical properties }
A63B 37/0061
                                   { Coefficient of restitution }
A63B 37/0062
                                   { Hardness }
A63B 37/0063
                                      { Hardness gradient }
A63B 37/0064
                                   { Diameter }
A63B 37/0065
                                   { Deflection or compression }
A63B 37/0066
                                   { Density; Specific gravity }
A63B 37/0067
                                   { Weight; Mass }
A63B 37/0068
                                   { Initial velocity }
A63B 37/0069
                                   { Flexural modulus }
A63B 37/007
                            { Characteristics of the ball as a whole }
A63B 37/0072
                               { with a specified number of layers }
A63B 37/0073
                                   { Solid, i.e. formed of a single piece }
A63B 37/0074
                                   { Two piece balls, i.e. cover and core }
A63B 37/0075
                                   { Three piece balls, i.e. cover, intermediate layer and core }
A63B 37/0076
                                   { Multi-piece balls, i.e. having two or more intermediate layers }
A63B 37/0077
                               { Physical properties }
A63B 37/0078
                                   { Coefficient of restitution }
A63B 37/008
                                   { Diameter }
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A63B 37/0081
                                   { Deflection }
                      . . . .
A63B 37/0082
                                   { Density; Specific gravity }
                      . . . .
A63B 37/0083
                                   { Weight; Mass }
A63B 37/0084
                                   { Initial velocity }
A63B 37/0086
                                   { Flexural modulus }
A63B 37/0087
                                   { Deflection or compression }
A63B 37/0088
                                   { Frequency }
A63B 37/0089
                                   { Coefficient of drag }
A63B 37/009
                                   { Coefficient of lift }
A63B 37/0091
                                   { Density distribution amongst the different ball layers }
A63B 37/0092
                                   { Hardness distribution amongst the different ball layers }
                      . . . .
A63B 37/0093
                                   { Moisture vapour transmission rate (MVTR) }
A63B 37/0094
                                   { Rebound resilience }
A63B 37/0095
                                   { Scuff resistance }
A63B 37/0096
                                   { Spin rate }
A63B 37/0097
                                   { Layers interlocking by means of protrusions or inserts, lattices or the like }
                      . . . .
A63B 37/0098
                         { Rigid hollow balls, e.g. for pètanque }
A63B 37/02
                         Special cores { ( <u>A63B 37/0001</u> , <u>A63B 37/0003</u> take precedence ) }
A63B 37/04
                             Rigid cores
A63B 37/06
                             Elastic cores
A63B 37/08
                            Liquid cores
                             Plastic cores
A63B 37/10
                             with eccentric centre of gravity
A63B 37/12
                         Special coverings, { i.e. outer layer material ( A63B 37/0001, A63B 37/0003 take
                         precedence)}
A63B 37/14
                         Special surfaces { ( A63B 37/0004 takes precedence ) }
A63B 39/00
                      Hollow non-inflatable balls, { i.e. having no valves ( rigid balls A63B 37/00 ) }
A63B 39/02
                         Arrangements for maintaining the pressure
A63B 39/025
                             { using containers with pressurising means for balls not in use ( packages under
                             vacuum or pressure, or special atmospheres B65D 81/20)
A63B 39/027
                            { using special inflation gases }
A63B 39/04
                             Pricking-balls; { Tools for blowing them up }
A63B 39/06
                         Special coverings
A63B 39/08
                            made of two halves
A63B 41/00
                      Hollow inflatable balls (connecting valves to inflatable elastic bodies B60C 29/00;
                      valves, e.g. self-closing valves F16K)
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A63B 41/02	. Bladders
A63B 41/04	Closures therefor
A63B 41/08	. Ball covers Closures therefor
A63B 41/085	{ Closures }
A63B 41/10	. Bladder and cover united
A63B 41/12	. Tools or devices for blowing up or closing balls ({ for pricking-balls $\underline{A63B\ 39/04}$ } ; air pumps $\underline{F04}$)
A63B 43/00	Balls with special arrangements
A63B 43/002	. { with special configuration, e.g. non-spherical (discs for throwing A63B 65/10) }
A63B 43/004	. { electrically conductive, e.g. for automatic arbitration }
A63B 43/005	. { with adhesive type surfaces, e.g. hook-and-loop type fastener }
A63B 43/007	. { Arrangements on balls for connecting lines or cords }
A63B 43/008	. { with means for improving visibility, e.g. special markings or colours (illuminating or reflecting means $\underline{A63B\ 43/06}$) }
A63B 43/02	. with a handle
A63B 43/04	 with an eccentric centre of gravity with mechanism for changing the centre of gravity (solid balls <u>A63B 37/10</u>; { motorised rolling toys <u>A63H 33/005</u> })
A63B 43/06	. with illuminating devices; { with reflective surfaces }
A63B 45/00	Apparatus or methods for manufacturing balls (working of plastics or substances in a plastic state <u>B29</u>)
A63B 45/02	. Marking of balls
A63B 47/00	Devices for handling or treating balls, { e.g. for holding or carrying balls (for maintaining ball pressure $\underline{A63B\ 39/02}$; ball holders combined with racket presses $\underline{A63B\ 49/16}$, with racket covers or cases $\underline{A63B\ 49/18}$, fitted on golf bags $\underline{A63B\ 55/02}$)}
A63B 47/001	. { Ball holders attached to the player`s body }
A63B 47/002	 { Devices for dispensing balls, e.g. from a reservoir (automatic teeing devices <u>A63B</u> 57/0006; devices for projecting balls <u>A63B 69/40</u>) }
A63B 47/005	. { Ball heating devices }

1005 47/007	
A63B 47/007	. { Devices for carrying, stacking or transporting bowling balls }
A63B 47/008	. { Devices for measuring or verifying ball characteristics (measuring or testing in general $\underline{\text{G01}}$) }
A63B 47/02	. for picking-up { or collecting }
A63B 47/021	• • { for picking-up automatically, e.g. by apparatus moving over the playing surface }
A63B 47/024	{ for collecting by using a sweeping means moving across the playing surface }
A63B 47/025	{ Installations continuously collecting balls from the playing areas, e.g. by gravity, with conveyer belts }
A63B 47/04	. for cleaning balls (apparatus for cleaning balls, as accessories for bowling- or table alleys $\underline{\text{A63D 5/10}}$)
Guide heading:	Rackets, bats, or other accessories for ball games
A63B 49/00	Tennis, badminton, or like rackets
	WARNING
	Group $\underline{A63B\ 49/00}$ M, $\underline{A63B\ 49/06}$ are not complete pending a reclassification. See also this group, its subgroups and other groups of $\underline{A63B}$
A63B 49/002	. { String guides on frames }
A63B 49/005	. { Means for clamping string ends on frames }
A63B 49/007	. { Means for achieving greater mobility of the string bed }
A63B 49/02	. Frames
A63B 49/027	{ Throat section, i.e. sections and elements between head and handle }
A63B 49/0276	{ T-shaped connection elements between head and handle }
A63B 49/0288	{ with easily dismountable parts, e.g. head, handle or grip }
A63B 49/0294	{ with head subframes for replacing the stringing }
A63B 49/04	with balancing devices { (A63B 59/0092 , A63B 59/0096 take precedence) }
A63B 49/06	with slits { (slits for guiding strings <u>A63B 49/002</u> ; slits for cooling or ventilation <u>A63B 59/0037</u>) }
A63B 49/08	with special construction of the handle
A63B 49/10	made of non-metallic materials, other than wood
A63B 49/106	{ with inflatable tubes, e.g. inflatable during fabrication }
A63B 49/12	made of metal
A63B 49/14	Protection devices on the frame
A63B 49/16	. Presses, { e.g. with ball holders (ball holders in general A63B 47/00) }
A63B 49/18	. Covers { or cases, e.g. with ball holders (ball holders in general $\underline{A63B\ 47/00}$) }

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A63B 51/00
                      Stringing tennis rackets { ( string guides on frames A63B 49/002 ; clamping strings on
                      frames A63B 49/005)
A63B 51/005
                      . { Devices for measuring the tension of the string ( for controlling the tension during
                         stringing A63B 51/14; measuring force, in general G01L)}
A63B 51/007
                      • { Pre-woven string-sets ready for insertion into a frame }
A63B 51/008
                        { String aligning tools for rackets }
A63B 51/02
                         Strings
                         String substitutes; { Products applied on strings, e.g. for protection against humidity or
                         wear (ropes or cables in general <u>D07B</u>; yarns or threads for use in sports
                         applications D02G 3/444; mechanical methods or apparatus in the manufacture of
                         artificial filaments, threads, fibres, bristles or ribbons <u>D01D</u>; strings for musical
                         instruments G10D 3/10)}
A63B 51/04
                             Sheet-like structures used as substitutes
A63B 51/06
                         Double-sided stringings
A63B 51/08
                         Diagonal stringings
A63B 51/10
                         Reinforcements for stringings
A63B 51/105
                            { Intermediate members for string cross-points }
A63B 51/12
                         Devices arranged in or on the racket for adjusting the tension of the strings
A63B 51/14
                         Devices for stringing, { e.g. controlling the tension of the string during stringing }
A63B 53/00
                      Golf clubs { ( cleaning or maintenance A63B 57/0087; measuring, verifying or correcting
                      golf-club characteristics A63B 59/0074; clubs or attachments on clubs for golf training
                      A63B 69/3632)}
A63B 53/007
                      . { Putters }
                         Joint structures between the head and the shaft
A63B 53/02
A63B 53/04
                         Heads
A63B 53/0466
                             { wood-type }
A63B 53/047
                            { iron-type }
A63B 53/0475
                                { with one or more enclosed cavities }
A63B 53/0487
                            { for putters ( A63B 53/065 takes precedence ) }
A63B 53/06
                            adjustable
A63B 53/065
                      . . .
                                { for putters }
A63B 53/08
                      . with special arrangements for obtaining a variable impact
A63B 53/10
                      • { Shafts, e.g. } non-metallic shafts { ( metallic A63B 53/12 ) }
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A63B 53/12	. Metallic shafts
A63B 53/14	. Handles
A63B 53/145	{ Weighted handles }
A63B 53/16	adjustable
A63B 55/00	Bags for golf clubs Stands for golf clubs for use on the course
A63B 55/004	. { Covers or hoods for golfbags }
A63B 55/005	{ releasably attached }
A63B 55/007	. { Covers for golf club heads; Connector means therefor }
A63B 55/008	• { Releasably mounted accessories fitted outside the bag, e.g. straps or holders (<u>A63B 55/02</u> and <u>A63B 55/04</u> take precedence; covers for golfbags <u>A63B 55/004</u> ; covers for club heads <u>A63B 55/007</u>) }
A63B 55/02	. with special { or detachable } receptacles for the balls
A63B 55/04	. Supports, { e.g. } with devices for anchoring to the ground
A63B 55/045	{ Legs opening automatically upon putting the bag on the ground }
A63B 55/08	 Wheeled carriers for golf bags (running gear or propulsion features <u>B60</u>; { insofar as the features thereof are generic to hand carts <u>B62B</u>})
A63B 55/087	{ motorised }
A63B 55/10	Stands for golf clubs, { e.g. } for use on the course; { Golf club holders, racks or presses }
A63B 57/00	Golf game accessories, e.g. golf cups, golf tees
A63B 57/0006	• { Automatic teeing devices (devices for automatically dispensing balls in general A63B 47/002) }
A63B 57/0012	. { Devices for forming the tees }
A63B 57/0018	. { Tees; Tee-holders; Devices for inserting or extracting tees }
A63B 57/0031	{ Tee-holders (to be fitted on golf bags or caddies <u>A63B 55/008</u>); Tee-gauges; Tee-repairing devices }
A63B 57/0037	{ Devices for inserting or extracting tees }
A63B 57/0043	{ Brush-type tee }
	WARNING
	Not complete, pending the reclassification; see also other subgroups of $\underline{\text{A63B}}$ $\underline{\text{57/00}}$
A63B 57/005	{ Tethered to something, e.g. ground or second body }

WARNING

Not complete, pending the reclassification; see also other subgroups of $\underline{A63B}$ 57/00

A63B 57/0056 . { Cups (with automatic ball ejector $\underline{A63B\ 57/0062}$) ; Hole or ball traps; Markers therefor, e.g. flags }

A63B 57/0062 . { Cups with automatic ball ejector means }

A63B 57/0068 . { for maintenance or repairing, e.g. of courts, greens, sands }

A63B 57/0075 . { Golf ball position markers or marker-holders }

A63B 57/0081 . { Hole information stands, e.g. tee-boxes }

A63B 57/0087 . { Cleaning or maintenance of golf-clubs, putters, shoes or other golf accessories (cleaning balls <u>A63B 47/04</u>; cleaning grips <u>A63B 59/0062</u>; cleaning footwear in general <u>A47L 23/00</u>)}

A63B 59/00 Bats, rackets, or the like, for other games (bats with a ball tethered thereto A63B 67/20); { Hand-held throwing or catching aids; Details or accessories of bats, rackets or the like, not limited to one of the groups A63B 49/00 to A63B 57/00, or not otherwise provided for }

WARNING

Groups <u>A63B 59/0025</u> to <u>A63B 59/0012</u>, <u>A63B 59/00</u> R, <u>A63B 59/00</u> V, <u>A63B 59/00</u> T, <u>A63B 59/0096</u> are not complete pending a reclassification. See also this group, its subgroups and other groups of <u>A63B</u>

A63B 59/0014 . { Handles or grips (A63B 49/08 takes precedence) }

A63B 59/0025 ... { contoured according to the anatomy of the user's hand }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0029 ... { Coverings specially adapted therefor, e.g. sleeves, ribbons }

WARNING

Not complete, pending the completion of a reclassification]

A63B 59/0033 .. { Caps, ferrules }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0037 { with grooves or holes for cooling, ventilating or sweat-reduction; with powder

dispensers }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/004 .. { with two handgrips }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0044 .. { adjustable in length }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0048 .. { with adjustable perimetric length }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0051 .. { with means for changing the angular position of the handle about its longitudinal axis }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0055 .. { the handle axis being different from the main axis of the bat or racket }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0059 ... { adjustable in stiffness }

WARNING

Not complete, pending the completion of a reclassification

A63B 59/0062 . { Devices for cleaning handles or grips }

A63B 59/0066 . { Bats or rackets having ball-dispensing means }

A63B 59/007 . { Bats or rackets with holding means provided inside, on the edge or on the rear face of the the striking surface (A63B 59/02 and A63B 59/04 take precedence) }

A63B 59/0074 . { Devices for measuring, verifying, correcting or customizing characteristics of golf-clubs, bats or rackets (having a weight movable along the longitudinal axis of the club due to centrifugal forces A63B 15/005) }

A63B 59/0077 . { corrugated cross sections }

A63B 61/006

A63B 61/02

WARNING

	Not complete, pending the completion of a reclassification
A63B 59/0088	. { Bats with through holes }
A63B 59/0092	. { Means for damping vibration (A63B 15/005 takes precedence) }
A63B 59/0096	. { Movable ballast means for varying the centre of mass during the stroke, e.g. by centrifugal force ($\underline{A63B\ 15/005}$ takes precedence; weights set in movement on impact of the ball for damping vibrations $\underline{A63B\ 59/0092}$) }
A63B 59/02	 for lacrosse, pelota or similar games; { Bats or rackets having means for catching or holding a ball, e.g. pockets, netting, adhesive type surface; Hand-held throwing or catching aids (juggling games with integral catching arrangements <u>A63B 67/083</u>) }
A63B 59/025	{ Hand-held throwing or catching aids for use with rings, discs, wheels or cylindrical throwing-bodies, or for use with balls having a central bore }
A63B 59/04	. for table tennis
A63B 59/06	. for baseball, rounders, or similar games
A63B 59/08	. for cricket
A63B 59/10	. for croquet; { Mallet-form bats (polo mallets A63B 59/16) }
A63B 59/12	. for hockey, { e.g. hurley sticks }
A63B 59/14	. for ice hockey { (A63B 59/12 takes precedence) }
A63B 59/16	. for polo
A63B 59/18	. Circular { or similar planar } bats for other games { not covered by groups $\underline{A63B\ 59/02}$ to $\underline{A63B\ 59/16}$ }
A63B 59/185	{ Paddles for paddle tennis, pádel tennis or platform tennis (stringed rackets for tennis or the like <u>A63B 49/00</u>) }
A63B 61/00	Tennis nets or accessories for tennis or like games, $\{$ e.g. volley-ball $($ devices for holding or carrying balls $\underline{A63B}$ $\underline{47/00}$; for table tennis $\underline{A63B}$ $\underline{67/04}$ $)$ $\}$
A63B 61/003	. { Nets for tennis or like games or accessories therefor (straining or adjusting devices on the posts $\underline{A63B\ 61/02}$) }

{ Accessories for training purposes mounted on the net }

time operated }

Revolvably-mounted posts; { Straining or adjusting devices on the posts, e.g. coin- or

A63B 61/04	. Straining or adjusting devices for nets, { e.g. centre strainers, single-double adjusters, net height meters (straining or adjusting devices on the posts $\underline{A63B\ 61/02}$) }
A63B 63/00	Targets or goals for ball games (golf cups A63B 57/00)
A63B 63/003	 non-electronic means for locating the point of impact on a target or the point of entry in the goal
A63B 63/004	. { Goals of the type used for football, handball, hockey or the like }
A63B 63/007	. { Target zones without opening defined on a substantially horizontal surface }
A63B 63/008	. { Goals for rugby or American football }
A63B 63/06	. Revolving targets; { Moving targets, e.g. moving or revolving on impact }
A63B 63/08	with { substantially } horizontal opening for ball, e.g. for basketball { ($\underline{A63B\ 57/0056}$, $\underline{A63B\ 63/06}$ take precedence) }
A63B 63/083	{ for basketball }
A63B 65/00	Implements for throwing (throwing toys $\underline{A63H\ 33/18}$; throwing weapons $\underline{F41B}$) ; { Mechanical projectors, e.g. using spring force }
A63B 65/02	. Spears or the like; { Javelins (darts F42B 6/003) }
A63B 65/04	. Throwing-hammers
A63B 65/06	. Heavy throwing-balls, { i.e. "medicine balls", shots, weights or stones for putting }
A63B 65/08	. Boomerangs; { Throwing apparatus therefor }
A63B 65/10	. Discus discs Quoits { (flying disc toys A63H 33/18) }
A63B 65/12	 Ball-throwing apparatus with or without catchers; { (hand-held throwing or catching aids A63B 59/02); Mechanical projectors, e.g. using spring force }
A63B 65/122	{ Hand-held mechanical projectors, e.g. for balls }
A63B 65/125	{ with handles or grips on both sides of the catching-throwing means, for two-handed use }
A63B 65/127	{ Means for throwing or catching balls, attached to the foot }
A63B 67/00	Miscellaneous sporting games
A63B 67/002	. { Games using balls, not otherwise provided for }
A63B 67/007	. { played in water }
A63B 67/02	 Special golf games, e.g. miniature golf, { e.g. golf putting games played on putting tracks; putting practice apparatus having an elongated platform as a putting track (

mats for golf practice A63B 69/3661) A63B 67/04 Table games physically beneficial for the human body, modelled on outdoor sports, e.g. table tennis ({ tables for table tennis A47B 25/003 }; other table games A63F) A63B 67/045 { Supports for table tennis nets } A63B 67/06 Ring or disc tossing games, { e.g. quoits; Throwing or tossing games, e.g. using balls; Games for manually rolling balls, e.g. marbles } A63B 67/066 { using balls on a horizontal playing ground, e.g. petanque } A63B 67/068 { Devices used therewith for measuring distance or difference in distance } A63B 67/08 Juggling or spinning ball games played as games of skill; { Juggling games (games using tethered bodies, e.g. balls A63B 67/10, A63B 67/20) A63B 67/083 { Juggling games with integral catching or bouncing arrangements } A63B 67/086 { Juggling games using sticks or discs } A63B 67/10 Games with thread-suspended or swingably-mounted bodies, e.g. balls, pointed bodies shaped as birds, animals, or the like, for aiming at and hitting targets (games using a bat with a ball tethered thereto A63B 67/20; pin games with tethered balls A63D 7/00); { Games using tethered bodies, e.g. balls, not otherwise provided for } A63B 67/12 Flip games, { i.e. games using playing bodies being flipped or twirled up in the air, e.g. for hitting them with a bat; Games of tip-cat } A63B 67/14 Curling stone Shuffleboard Similar sliding games { Curling brooms or brushes } A63B 67/148 A63B 67/16 Tethered aerial top or spinner games, { i.e. diabolo games } A63B 67/18 Badminton, shuttlecock, or like games with feathered missiles A63B 67/20 Games using a bat { or racket } with a { body, e.g. a } ball tethered thereto A63B 67/205 { the bat having one or more spigots for catching bodies having a bore, e.g. rings } A63B 67/22 the bat { or racket } having one or more holes { or pockets } therein, { e.g. for catching or collecting the ball; the bat comprising a ring or cup having a handle } A63B 69/00 Training appliances or apparatus for special sports (training of parachutists B64D 23/00) A63B 69/0002 { for baseball } A63B 69/0013 { Baseball bases } A63B 69/0015 { for cricket } A63B 69/0017 { for badminton }

{ for football (American-football dummies A63B 69/345) }

A63B 69/002

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A63B 69/0022
                        { for skating }
A63B 69/0024
                         { for hockey }
A63B 69/0026
                             { for ice-hockey }
A63B 69/0028
                         { for running, jogging or speed-walking (movable endless bands A63B 22/02)}
A63B 69/0035
                            { on the spot }
A63B 69/004
                         { for the martial arts, e.g. karate, judo ( A63B 69/20 , A63B 69/34 take precedence ) }
A63B 69/0046
                         { for bowling }
A63B 69/0048
                         { for mountaineering, e.g. climbing-walls, grip elements for climbing-walls }
A63B 69/0051
                         { not used, see subgroups and A63B 69/00 }
A63B 69/0053
                             { Apparatus generating random stimulus signals for reaction-time training involving
                             a substantial physical effort (testing reaction time A61B 5/162; reaction-time
                             games A63F 9/0096)
A63B 69/0057
                            { Means for physically limiting movements of body parts ( A63B 23/0211 takes
                            precedence ) }
A63B 69/0059
                                { worn by the user }
A63B 69/0064
                             { Attachments on the trainee preventing falling }
A63B 69/0066
                         { for wind-surfing }
A63B 69/0068
                         { for bull-fighting, or animal-roping }
A63B 69/0071
                         { for basketball }
A63B 69/0073
                         { Means for releasably holding a ball in position; Balls constrained to move around a
                         fixed point, e.g. by tethering ( not used, see subgroups and A63B 69/00 ) }
A63B 69/0075
                             { Means for releasably holding a ball in position prior to kicking, striking or the like (
                             golf tees A63B 57/0018)
                             { Balls tethered to a line or cord ( A63B 43/007 takes precedence; other games
A63B 69/0079
                            using tethered balls A63B 67/10; games using a bat or racket with a ball tethered
                             thereto A63B 67/20)
A63B 69/0084
                                { the line or cord being fixed to at least two points }
                                { the line or cord being attached to the user ( A63B 21/0608 takes precedence;
A63B 69/0086
                                punching balls attached to the user A63B 69/26)
A63B 69/0088
                                { the line or cord having a handle }
                      . . .
A63B 69/0091
                             { Balls fixed to a movable, tiltable or flexible arm }
A63B 69/0093
                      • { for surfing, i.e. without a sail; for skate or snow boarding }
A63B 69/0095
                        { for volley-ball }
A63B 69/0097
                         { Ball rebound walls ( with holes or in combination with nets A63B 63/00 ) }
A63B 69/02
                         for fencing, { e.g. means for indicating hits (fencing foils, sabres or epees F41B 13/02
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A63B 69/04
                         simulating the movement of horses (toy animals for riding A63G 19/00)
A63B 69/06
                         for rowing or sculling
A63B 69/08
                            with water-filled pools
A63B 69/10
                         Swimming instruction apparatus for use without water
A63B 69/12
                         Arrangements in swimming pools for teaching swimming { or for training }
A63B 69/125
                            { Devices for generating a current of water in swimming pools }
A63B 69/14
                            Teaching frames for swimming; { Swimming boards ( life-buoys, life-belts B63C
                            <u>9/08</u>)}
A63B 69/16
                         for cycling, { i.e. arrangements on or for real bicycles ( home-trainers A63B 23/0476 ) }
A63B 69/18
                         for skiing
A63B 69/182
                            { for cross-country-skiing ( A63B 23/0417 , A63B 69/0022 take precedence ) }
A63B 69/187
                            { for water-skiing }
A63B 69/20
                        Punching balls, { e.g. for boxing; Other boxing training devices, e.g. bags ( A63B
                         69/34 takes precedence)}
A63B 69/201
                            { Hanging heavy punching bags }
A63B 69/203
                            { Punching balls, i.e. mainly designed to be hit at resonant frequency }
A63B 69/205
                               { hanging downwards }
A63B 69/206
                               { mounted by using attachments at opposite points }
A63B 69/208
                               { mounted on a resilient foot }
A63B 69/24
                            mounted on, or suspended from, a movable support { not used, see subgroup }
A63B 69/26
                               attached to the human body
A63B 69/32
                            with indicating devices
A63B 69/325
                               { for vertical blows on a horizontal surface }
                      . . .
A63B 69/34
                        { Dummies, e.g. } boxing or { American- } football dummies
A63B 69/345
                            { (American-) football, rugby, wrestling dummies, e.g. for tackling, blocking }
A63B 69/36
                         for golf
A63B 69/3608
                            { Attachments on the body, e.g. for measuring, aligning, restraining ( A63B 69/0059
                            , A63B 69/3673 take precedence ) }
A63B 69/3611
                            { not used, see 69/36 and subgroups }
A63B 69/3614
                               { using electro-magnetic, magnetic or ultrasonic radiation emitted, reflected or
                      . . .
                               interrupted by the golf club }
A63B 69/3617
                               { Striking surfaces with impact indicating means, e.g. markers }
                            { for driving ( A63B 69/3608 , A63B 69/3658 , A63B 69/3661 , A63B 69/3667 and
A63B 69/3623
                            A63B 69/3691 take precedence ) }
A63B 69/3632
                               { Clubs or attachments on clubs, e.g. for measuring, aligning ( A63B 69/3614
                               takes precedence; clubs for swinging exercises in general A63B 15/00 ) }
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A63B 69/3635
                                   { with sound-emitting source }
A63B 69/3638
                                   { Normal golf clubs with directly attached weights }
A63B 69/3641
                                { with guides for guiding the swing }
                               WARNING
                                     Not complete, pending the reclassification; see also other subgroups of
                                     A63B 69/00
A63B 69/3644
                                   { Mechanical guide guiding the club head end during the complete swing,
                                   e.g. rails }
A63B 69/3647
                                      { with a flexible member fixed on the club and rotating around a fixed
                                      supporting point }
A63B 69/365
                                      { with arm or rod fixed on the club and rotating around a fixed supporting
                                      point }
A63B 69/3652
                               { Inclined platforms for practising drives from slopes }
A63B 69/3655
                               { Balls, ball substitutes, or attachments on balls therefor }
A63B 69/3658
                            { Means associated with the ball for indicating or measuring, e.g. speed, direction }
A63B 69/3661
                            { Mats for golf practice, e.g. mats having a simulated turf, a practice tee or a green
A63B 69/3667
                            { Golf stance aids, e.g. means for positioning a golfer`s feet }
A63B 69/3673
                               { Foot inclining aids; Foot wobbling devices }
A63B 69/3676
                            { for putting ( A63B 69/3608 , A63B 69/3661 , A63B 69/3667 and A63B 69/3697
                      . .
                            take precedence)}
A63B 69/3685
                               { Putters or attachments on putters e.g. for measuring, aligning ( A63B 69/3614
                               takes precedence)}
A63B 69/3688
                               { Balls, ball substitutes, or attachments on balls therefor }
A63B 69/3691
                            { Golf courses; Golf practising terrains having a plurality of driving areas, fairways,
                            greens (special golf games, e.g. miniature golf, A63B 67/02; mats for simulating
                            golf greens A63B 69/3661)
A63B 69/3694
                               { for driving only }
A63B 69/3697
                               { with putting taking place on a green other than the target green }
A63B 69/38
                         for tennis { ( A63B 61/006 , A63B 69/0073 and A63B 69/0097 take precedence ) }
A63B 69/385
                            { for practising the serve }
                         Stationarily-arranged devices for projecting balls { or other bodies ( ball-dispensing
A63B 69/40
                         devices A63B 47/002; golf cups with ball ejector means A63B 57/0062; targets with
                         means for returning balls by gravity or mechanically A63B 63/00 ) }; ( sling weapons
                         F41B 3/00; traps for clay-pigeon targets F41J 9/18)
A63B 69/406
                            { with rotating discs, wheels or pulleys gripping and propelling the balls or bodies
                            by friction }
A63B 69/407
                            { with spring-loaded propelling means }
A63B 69/408
                               { with rotating propelling arm }
A63B 69/409
                            { with pneumatic ball- or body-propelling means }
A63B 71/00
                      Games or sports accessories not covered in groups A63B 1/00 to A63B 69/00 (
                      starting appliances A63K 3/02)
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A63B 71/0009
                         { for handicapped persons }
A63B 71/0036
                         { Accessories for stowing, putting away or transporting exercise apparatus or sports
                         equipment ( handling or treating balls A63B 47/00; for golf clubs A63B 55/00) }
A63B 71/0045
                             { specially adapted for games played with rackets or bats }
A63B 71/0054
                         { Features for injury prevention on an apparatus, e.g. shock absorbers ( mats or the
                         like for absorbing shocks for jumping A63B 6/00 ) }
A63B 71/02
                         for large-room or outdoor sporting games
A63B 71/021
                             { Stays or guy-ropes ( for masts <u>E04H 12/20</u> , for tents <u>E04H 15/34</u> ) }
A63B 71/022
                             { Backstops, cages, enclosures or the like, e.g. for spectator protection, for
                            arresting balls }
A63B 71/023
                            { Supports, e.g. poles }
A63B 71/028
                                { Floor sockets for removable poles (sockets for poles in general E04H 12/22)
A63B 71/04
                         for small-room or indoor sporting games
A63B 71/06
                         Indicating or scoring devices for games or players, { or for other sports activities }
A63B 71/0605
                             { Decision makers and devices using detection means facilitating arbitration }
A63B 71/0608
                                { using mechanical, i.e. non-electrical means }
A63B 71/0616
                             { Means for conducting or scheduling competition, league, tournaments or rankings
A63B 71/0619
                            { Displays, user interfaces and indicating devices, specially adapted for sport
                             equipment, e.g. display mounted on treadmills }
A63B 71/0622
                                { Visual, audio or audio-visual systems for entertaining, instructing or motivating
                                the user }
A63B 71/0669
                                { Score-keepers or score display devices }
A63B 71/0672
                                   { using non-electronic means }
A63B 71/0686
                             { Timers, rhythm indicators or pacing apparatus using electric or electronic means }
A63B 71/0697
                             { Reservation devices }
A63B 71/08
                         Body-protectors for players or sportsmen, { i.e. body-protecting accessories affording
                         protection of body parts against blows or collisions } ( protective clothing or garments
                         for sporting purposes A41D 13/00)
A63B 71/081
                             { fluid-filled, e.g. air-filled }
A63B 71/085
                             { Mouth or teeth protectors ( A63B 71/081 takes precedence; protective face
                             masks A41D 13/00)
A63B 71/10
                            for the head ({ A63B 71/081 takes precedence}; in the form of caps or hats A42B
                             1/08; helmets A42B 3/00)
A63B 71/12
                            for the body, { e.g. shoulders } , or the legs { ( A63B 71/081 takes precedence ) }
A63B 71/1216
                                { for the genital area }
A63B 71/1225
                                { for the legs, e.g. thighs, knees, ankles, feet (bandages, e.g. orthesis-like
                                supports or braces A61F 5/0102; for strengthening joints A61F 13/06)
A63B 71/1291
                                { for the neck ( as a part of a helmet A42B ) }
A63B 71/14
                            for the hands e.g. baseball, boxing or golfing gloves (archer's finger tabs F41B
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	<u>5/16</u>)
A63B 71/141	{ in the form of gloves (gloves in general A41D 19/00) }
A63B 71/143	{ Baseball or hockey gloves }
A63B 71/145	{ Boxing gloves }
A63B 71/146	{ Golf gloves }
	WARNING
	not complete, see A63B 71/148
A63B 71/148	{ Gloves for bowling and other ball games }
Guide heading:	
A63B 2005/00	Apparatus for jumping (mats for jumping $\underline{A63B\ 6/00}$; for racing or riding sports, e.g. hurdles $\underline{A63K}$)
A63B 2005/08	. Spring-boards (of trampoline type <u>A63B 5/11</u> ; { in the form of spring mats <u>A63B 6/00</u> })
A63B 2005/085	for launching, e.g. catapulting
A63B 2005/16	 Training devices for jumping Devices for balloon-jumping Jumping aids { (A63B 25/02 , A63B 25/10 take precedence) }
A63B 2005/163	Free-fall jumping on elastic cords, e.g. Bungee jumping
A63B 2009/00	Climbing poles, frames, or stages { (climbing walls for mountaineering training A63B 69/0048; endless loop ladders A63B 22/04) }
	WARNING
	Documents are being reclassified to A63B 21/072; A63B 21/0728 is complete
A63B 2009/002	. Flat climbing nets
A63B 2009/004	. Three-dimensional rope or cable networks
A63B 2009/006	. Playground structures
A63B 2009/008	with water spraying means
A63B 2021/00	Exercising apparatus for developing or strengthening the muscles or joints of the body by working against a counterforce, with or without measuring devices (electric or electronic controls therefor $\underline{A63B\ 24/00}$; measuring muscular strength $\underline{A61B}\ 5/22$)
A63B 2021/002	 isometric or isokinetic, i.e. substantial force variation without substantial muscle motion { or wherein the speed of the motion is independent of the force applied by the user }

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A63B 2021/0026
                            isokinetic exercising, i.e. the speed or the maximum speed being independent of
                            the force applied by the user
A63B 2021/005
                         using electromagnetic or electric force-resisters
A63B 2021/0053
                            { using an alternator or a dynamo }
A63B 2021/0054
                               for charging a battery
                     . . .
A63B 2021/0055
                               the produced electric power used as a source for other equipment, e.g. T.V.
A63B 2021/0058
                            { using a motor }
A63B 2021/0059
                               using a frequency controlled AC motor
A63B 2021/008
                         using hydraulic or pneumatic force-resisters { not used, see subgroups }
A63B 2021/0081
                            { using hydraulic force-resisters }
A63B 2021/0082
                               using electrorheological or magnetic-rheological fluids
A63B 2021/0085
                            { using pneumatic force-resisters }
A63B 2021/0086
                               Suction cups
                     . . .
A63B 2021/02
                         using resilient force-resisters
A63B 2021/021
                            Flip-flop, overcentre, toggle systems
A63B 2021/022
                            with different springs acting at different parts of the stroke
A63B 2021/06
                         User-manipulated weights
A63B 2021/0611
                            { to be launched or thrown along guiding means against gravity forces }
A63B 2021/0612
                               with adjustable inclination angle of the guiding means
A63B 2021/0614
                               with substantially vertical guiding means (A63B 21/062 takes precedence)
A63B 2021/0615
                            { the weight pivoting about a fixed horizontal fulcrum }
                      . .
                               Weight pivot moment being adjustable
A63B 2021/0616
                     . . .
A63B 2021/0617
                               Weight pivot moment changing as a function of the pivot angle
                      . . .
A63B 2021/062
                            including guide for vertical array of weights
A63B 2021/0623
                               Weight linking or selecting means
A63B 2021/0626
                               Weights being lifted by means other than flexible ones
                     . . .
A63B 2021/072
                            Dumb-bells, bar-bells or the like, { also other free movable weights, e.g. weight
                      . .
                            discs having an integral peripheral handle }
                            WARNING
                                 not complete, see also A63B 11/00, A63B 13/00, A63B 15/00
A63B 2021/0722
                               transformable, e.g. from dumb-bell to bar-bell or club
                      . . .
A63B 2021/078
                            Devices for bench press exercises; { Supports, guiding means, drop-limiting means
                     . .
                            for bar-bells, combined or not combined with benches }
                               Safety or other features related to bar-bells
A63B 2021/0783
                     . . .
A63B 2021/0786
                     . . . .
                                  drop-limiting means
A63B 2021/16
                         Supports for anchoring force-resisters
A63B 2021/1609
                            on a chair
A63B 2021/1672
                            on beds, mattresses
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A63B 2021/169 mounted on or against a wall A63B 2021/22 Resisting devices with rotary bodies, { e.g. by overcoming gyroscopic forces (A63B 21/0608 takes precedence)} by overcoming gyroscopic forces, e.g. by turning the spin axis A63B 2021/222 A63B 2022/00 Exercising apparatus specially adapted for conditioning the cardio-vascular system, for training agility or co-ordination of movements (force-resisting aspects A63B 21/00; { for particular parts of the body, e.g. to strengthen particular limbs or muscles A63B 23/00; } electric or electronic controls therefor A63B 24/00) **NOTE** In this subclass, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its groups, which is considered to represent information of interest for search, may also be classified in each of those groups. A63B 2022/0002 { involving an exercising of arms (for strengthening the upper limbs A63B 23/12) } A63B 2022/0005 with particular movement of the arms provided by handles moving otherwise than pivoting about a horizontal axis parallel to the body-symmetrical-plane A63B 2022/0015 • { with an adjustable movement path of the support elements } A63B 2022/0017 the adjustment being controlled by movement of the user, e.g. the applied force, the direction of rotation or the speed A63B 2022/002 electronically, e.g. by using a program A63B 2022/0025 Particular aspects relating to the orientation of movement paths of the limbs relative to the body Relative relationship between the movements of the limbs A63B 2022/0028 the movement path being non-parallel to the body-symmetrical-plane, e.g. support elements moving at an angle to the body-symmetrical-plane A63B 2022/003 the movement path being perpendicular to the body-symmetrical-plane A63B 2022/0033 Lower limbs performing together the same movement, e.g. on a single support element A63B 2022/0035 Upper limbs performing together the same movement, e.g. on a single support element A63B 2022/0038 One foot moving independently from the other, i.e. there is no link between the movements of the feet one hand moving independently from the other hand, i.e. there is no link between A63B 2022/0041 the movements of the hands the movements of the limbs of one body half being synchronised, e.g. the left arm A63B 2022/0043 moving in the same direction as the left leg

{ with cantilevered support elements pivoting about an axis (A63B 22/0076 takes

e.g. the axis for the foot support elements are arranged at hip height

each support element being cantilevered by a parallelogram system

the support elements being supported at a substantial distance below their axis,

{ the pivoting movement being in a plane inclined with respect to the horizontal

A63B 2022/0048

A63B 2022/0051

A63B 2022/0053

A63B 2022/0064

precedence)}

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plane, e.g. a step and twist movement }
A63B 2022/0066
                               the movement of the support elements being downward-inward, i.e. the support
                      . . .
                               elements are moving towards the body-symmetrical-plane
A63B 2022/0069
                               { about an axis inclined with respect to the horizontal plane, e.g. steppers with
                               an inclined axis }
A63B 2022/0071
                                  the axis being located behind the user, e.g. for skate training
A63B 2022/0074
                                  the axis being located in front of the user, e.g. for steppers with twist
                      . . . .
                                  movement
A63B 2022/0076
                        { Rowing machines ( seats moving during exercise A63B 22/0087; training appliances
                         for rowing or sculling on boats A63B 69/06)
A63B 2022/0079
                            with a pulling cable
A63B 2022/0082
                            with pivoting handlebars
A63B 2022/0084
                               pivoting about a horizontal axis
                     . . .
A63B 2022/0092
                         for training agility or co-ordination of movements
A63B 2022/0094
                         for active rehabilitation, e.g. slow motion devices
A63B 2022/0097
                         for avoiding blood stagnations, e.g. Deep Vein Thrombosis (DVT)
A63B 2022/02
                         with movable endless bands { ( e.g. treadmills, other training appliances for running on
                         the spot A63B 69/0028)}
A63B 2022/0207
                            having shock absorbing means
A63B 2022/0214
                               between the belt supporting deck and the frame
A63B 2022/0221
                               on the frame or sub-frame supporting the rollers
                      . . .
A63B 2022/0228
                               with variable resilience
A63B 2022/0235
                            { driven by a motor }
                      . .
A63B 2022/0242
                               { with speed variation }
                      . . .
A63B 2022/025
                                  electrically, e.g. with D.C. motors or eddy current machines
A63B 2022/0264
                                  hydraulically
A63B 2022/0271
                                  omnidirectional
A63B 2022/0278
                               with reversible direction of the running surface
A63B 2022/0292
                            with separate belts for each leg, e.g. dual deck
A63B 2022/06
                        with { support elements performing a } rotating cycling movement, { i.e. a closed path
                         movement } ( support stands for bicycles A63B 69/16; unicycles B62K 1/00 )
                            { performing a circular movement, e.g. ergometers }
A63B 2022/0605
A63B 2022/0611
                               Particular details or arrangement of cranks
A63B 2022/0617
                                  with separate crank axis for each limb, e.g. being separately adjustable or
                      . . . .
                                  non parallel
A63B 2022/0623
                                  Cranks of adjustable length
A63B 2022/0629
                                  each pedal being supported by two or more cranks
A63B 2022/0635
                               specially adapted for a particular use
A63B 2022/0641
                                  enabling a lateral movement of the exercising apparatus, e.g. for simulating
                      . . . .
                                  movement on a bicycle
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A63B 2022/0647	for cycling in a standing position, i.e. without a seat or support for the trunk
A63B 2022/0652	for cycling in a recumbent position
A63B 2022/0658	for cycling with a group of people, e.g. spinning classes
A63B 2022/0664	{ performing an elliptic movement }
A63B 2022/067	with crank and handles being on opposite sides of the exercising apparatus with respect to the frontal body-plane of the user, e.g. the crank is behind and handles are in front of the user
A63B 2022/0676	with crank and handles being on the same side of the exercising apparatus with respect to the frontal body-plane of the user, e.g. crank and handles are in front of the user
A63B 2022/0682	with support elements being cantilevered, i.e. the elements being supported only on one side without bearing on tracks on the floor below the user
A63B 2022/0688	with cranks being substantially within the horizontal moving range of the support elements, e.g. by using planetary gearings
A63B 2022/18	with elements, { i.e. platforms, } having a circulating, { nutating } or rotating movement, generated by oscillating movement of the user, { e.g. platforms wobbling on a centrally arranged spherical support } (hoop exercising apparatus A63B 19/00; { eccentric weights put into orbital motion by nutating movement of the user A63B 21/0608; pots rotating or rocking by moving the whole body A63G 23/00 })
A63B 2022/185	specially adapted for using with a single foot
A63B 2022/20	 using rollers, wheels, castors or the like, { e.g. gliding means, } to be moved over the floor or other surface, { e.g. guide tracks, } during exercising
A63B 2022/201	{ for moving a support element in reciprocating translation, e.g. for sliding back and forth on a guide track }
A63B 2022/206	on a curved path
A63B 2023/00	Exercising apparatus specially adapted for particular parts of the body ($\underline{A63B\ 22/00}$ takes precedence; force-resisting aspects $\underline{A63B\ 21/00}$; electric or electronic controls therefor $\underline{A63B\ 24/00}$; devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards $\underline{G09B\ 15/06}$)
A63B 2023/003	. by torsion of the body part around its longitudinal axis
A63B 2023/006	. for stretching exercises
A63B 2023/035	. for limbs, i.e. upper or lower limbs, e.g. simultaneously
A63B 2023/04	for lower limbs { (Training appliances for special sports <u>A63B 69/00</u> ; For the purpose of producing mechanical power <u>F03G 5/00</u>) }
A63B 2023/0405	{ involving a bending of the knee and hip joints simultaneously (A63B 23/0476 takes precedence) }
A63B 2023/0411	Squatting exercises
A63B 2023/0429	{ with guided foot supports moving parallel to the body-symmetrical-plane by being cantilevered about a horizontal axis }
A63B 2023/0435	(not used)
A63B 2023/0441	cantilevered about two horizontal axes, e.g. parallelogram systems
A63B 2023/0447	the axis being in the body-simmetrical-plane
A63B 2023/0452	the foot support being substantially below said axes

A63B 2024/00	Electric or electronic controls for exercising apparatus of preceding groups; { Controlling or monitoring of exercises, sportive games, training or athletic performances }
A63B 2024/0003	. { Analysing the course of a movement or motion sequences during an exercise or trainings sequence, e.g. swing for golf or tennis }
A63B 2024/0006	• Computerised comparison for qualitative assessment of motion sequences or the course of a movement }
A63B 2024/0009	Computerised real time comparison with previous movements or motion sequences of the user
A63B 2024/0012	Comparing movements or motion sequences with a registered reference
A63B 2024/0015	Comparing movements or motion sequences with computerised simulations of movements or motion sequences, e.g. for generating an ideal template as reference to be achieved by the user
A63B 2024/0018	using non electronic means
A63B 2024/0021	. { Tracking a path or terminating locations }
A63B 2024/0025	Tracking the path or location of one or more users, e.g. players of a game
A63B 2024/0028	Tracking the path of an object, e.g. a ball inside a soccer pitch
A63B 2024/0031	at the starting point
A63B 2024/0034	during flight
A63B 2024/0037	on a target surface or at impact on the ground
A63B 2024/004	Multiple detectors or sensors each defining a different zone
A63B 2024/0043	Systems for locating the point of impact on a specific surface
A63B 2024/0046	Mechanical means for locating the point of impact or entry
A63B 2024/005	Keeping track of the point of impact or entry
A63B 2024/0053	for locating an object, e.g. a lost ball
A63B 2024/0056	for statistical or strategic analysis
A63B 2024/0062	 { Monitoring athletic performances, e.g. for determining the work of a user on an exercise apparatus, the completed jogging or cycling distance }
A63B 2024/0065	Evaluating the fitness, e.g. fitness level or fitness index
A63B 2024/0068	 Comparison to target or threshold, previous performance or not real time comparison to other individuals
A63B 2024/0071	Distinction between different activities, movements, or kind of sports performed
A63B 2024/0075	 { Means for generating exercise programs or schemes, e.g. computerized virtual trainer, e.g. using expert databases }
A63B 2024/0078	Exercise efforts programmed as a function of time
A63B 2024/0081	Coaching or training aspects related to a group of users
A63B 2024/0087	• { Electric or electronic controls for exercising apparatus of groups A63B 21/00 - A63B 23/00 , e.g. controlling load }
A63B 2024/009	the load of the exercise apparatus being controlled in synchronism with visualising systems, e.g. hill slope
A63B 2024/0093	 the load of the exercise apparatus being controlled by performance parameters, e.g. distance or speed

A63B 2024/0096	using performance related parameters for controlling electronic or video games or avatars
A63B 2026/00	Exercising apparatus not covered by groups A63B 1/00 to A63B 25/00
A63B 2026/003	• { for improving balance or equilibrium (balance beams <u>A63B 4/00</u> ; apparatus for rope dancing <u>A63B 7/08</u> ; balancing drums, balancing boards or the like <u>A63B 22/16</u>) }
A63B 2026/006	with feet supports below their pivotal point
A63B 2029/00	Apparatus for mountaineering (helmets $\underline{A42B\ 3/00}$; non-skid devices or attachments for footwear, e.g. mountain climbing irons $\underline{A43C\ 15/00}$; breathing masks or helmets for use at high altitudes $\underline{A62B\ 18/00}$; { safety belts or body harnesses $\underline{A62B\ 35/00}$ }; picks $\underline{B25D\ 7/00}$)
A63B 2029/02	 Mountain guy-ropes or accessories, e.g. avalanche ropes { (hooks, e.g. snaphooks, therefor <u>F16B 45/00</u>) } Means for indicating the location of accidentally buried, e.g. snow-buried, persons (detecting hidden masses in general <u>G01V</u>)
	NOTE .
	Contrary to the wording of group $\underline{A63B~29/02}$, devices for lowering persons are classified in $\underline{A62B~1/06}$
A63B 2029/021	{ Means for indicating the location of accidentally buried, e.g. snow-buried, persons (detecting hidden masses in general $\underline{\text{G01V}}$) }
A63B 2029/022	with means for automatically activating signal means in case of an avalanche
A63B 2031/00	Swimming aids (teaching swimming A63B 69/10 to A63B 69/14 ; life-saving in water, { e.g. life-buoys, life-belts } , B63C 9/00)
A63B 2031/08	Swim fins, flippers or other swimming aids held by, or attachable to, the hands, arms, feet or legs (A63B 31/18 takes precedence; worn as gloves A63B 31/02)
A63B 2031/10	held by, or attachable to, the hands or feet
A63B 2031/11	attachable only to the feet
A63B 2031/112	with means facilitating walking, e.g. rectractable, detachable or pivotable blades
A63B 2031/115	with blade at an angle to the plane of the foot when in use, e.g. to reduce plantar flexion
A63B 2031/117	with blade lying substantially in the body-symmetrical plane, e.g. for breast stroke
A63B 2033/00	Swimming equipment attachable to the head, e.g. swim caps or goggles (diving masks $\underline{\sf B63C\ 11/12}$; breathing aids, e.g. snorkels, $\underline{\sf B63C\ 11/18}$)
A63B 2033/002	. { Swimming goggles (with means covering the nostrils <u>B63C 11/12</u>) }
A63B 2033/004	comprising two separate lenses joined by a flexible bridge
A63B 2033/006	means allowing adjustment of the bridge
A63B 2033/008	stepless adjustment

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A63B 2037/00
                      Solid balls; { Rigid hollow balls }
                      Marbles (heavy throwing balls A63B 65/06)
A63B 2037/0003
                     • { Golf balls (for practising drives A63B 69/3655, for practising puts A63B 69/3688) }
                         WARNING
                              Subgroups of A63B 37/0003 are not complete pending reclassification; see also
                              this group
A63B 2037/007
                            { Characteristics of the ball as a whole }
A63B 2037/0077
                               { Physical properties }
A63B 2037/0079
                                  Compression
                     . . . .
A63B 2037/02
                         Special cores { ( <u>A63B 37/0001</u> , <u>A63B 37/0003</u> take precedence ) }
A63B 2037/06
                            Elastic cores
A63B 2037/065
                               Foam
A63B 2037/08
                            Liquid cores
                     . .
                            Plastic cores
A63B 2037/082
                               Granular, eg comprising beads
A63B 2037/085
                               liquid, jellylike
A63B 2037/087
                               Wound cores or layers
                      . . .
                         Special coverings, { i.e. outer layer material ( A63B 37/0001 , A63B 37/0003 take
A63B 2037/12
                         precedence ) }
A63B 2037/125
                            stitchings
A63B 2039/00
                     Hollow non-inflatable balls, { i.e. having no valves ( rigid balls A63B 37/00 ) }
A63B 2039/003
                         substantially hollow and pressureless
A63B 2039/006
                         pressurised
A63B 2039/02
                         Arrangements for maintaining the pressure
A63B 2039/022
                            using special gas-impermeable layers
A63B 2041/00
                     Hollow inflatable balls (connecting valves to inflatable elastic bodies B60C 29/00;
                     valves, e.g. self-closing valves F16K)
A63B 2041/005
                        with counterweight for adjusting the centre of gravity
A63B 2043/00
                     Balls with special arrangements
A63B 2043/001
                         Short-distance or low-velocity balls for training, or for playing on a reduced area
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A63B 2047/00	Devices for handling or treating balls, { e.g. for holding or carrying balls (for maintaining ball pressure $\underline{A63B\ 39/02}$; ball holders combined with racket presses $\underline{A63B\ 49/16}$, with racket covers or cases $\underline{A63B\ 49/18}$, fitted on golf bags $\underline{A63B\ 55/02}$)}
A63B 2047/002	. { Devices for dispensing balls, e.g. from a reservoir (automatic teeing devices $\underline{A63B}$ $\underline{57/0006}$; devices for projecting balls $\underline{A63B}$ $\underline{69/40}$)}
A63B 2047/004	having means preventing bridge formation during dispensing
A63B 2047/02	. for picking-up { or collecting }
A63B 2047/021	{ for picking-up automatically, e.g. by apparatus moving over the playing surface }
A63B 2047/022	Autonomous machines which find their own way around the playing surface
A63B 2047/025	{ Installations continuously collecting balls from the playing areas, e.g. by gravity, with conveyer belts }
A63B 2047/027	Hydraulic ball transport
A63B 2047/028	pneumatic ball transport
A63B 2047/04	. for cleaning balls (apparatus for cleaning balls, as accessories for bowling- or table alleys $\underline{\text{A63D 5/10}}$)
A63B 2047/043	with drying means
A63B 2047/046	Motorised

WARNING

Tennis, badminton, or like rackets

A63B 2049/00

Group $\underline{A63B\ 49/00}\ M$, $\underline{A63B\ 49/06}$ are not complete pending a reclassification. See also this group, its subgroups and other groups of $\underline{A63B}$

A63B 2049/02	. Frames
A63B 2049/0205	comprising at least two similar parts assembled with the interface plane parallel to the string plane
A63B 2049/0211	with variable thickness of the head in a direction perpendicular to the string plane
A63B 2049/0217	with variable thickness of the head in the string plane
A63B 2049/0223	with defined head dimensions
A63B 2049/0229	surface area
A63B 2049/0235	height
A63B 2049/0241	width
A63B 2049/0247	with defined overall length
A63B 2049/0252	with defined weight
A63B 2049/0258	without strings
A63B 2049/0264	head only
A63B 2049/027	{ Throat section, i.e. sections and elements between head and handle }
A63B 2049/0282	with two legs having mutually different constructions
A63B 2049/10	made of non-metallic materials, other than wood

A63B 2049/103	string holes produced during moulding process
A63B 2051/00	Stringing tennis rackets { (string guides on frames $\underline{A63B}$ $\underline{49/002}$; clamping strings on frames $\underline{A63B}$ $\underline{49/005}$) }
A63B 2051/001	. using strings with different characteristics, e.g. gut and nylon, on the same frame
A63B 2051/002	. using strings with different cross-sections, e.g. different thickness, on the same frame
A63B 2051/004	. using strings with different tension on the same frame
A63B 2051/02	 Strings String substitutes; { Products applied on strings, e.g. for protection against humidity or wear (ropes or cables in general <u>D07B</u>; yarns or threads for use in sports applications <u>D02G 3/444</u>; mechanical methods or apparatus in the manufacture of artificial filaments, threads, fibres, bristles or ribbons <u>D01D</u>; strings for musical instruments <u>G10D 3/10</u>) }
A63B 2051/023	with characteristics, e.g. diameter, elasticity varying along the length of the string
A63B 2051/026	with non-circular cross-section
A63B 2051/04	Sheet-like structures used as substitutes
A63B 2051/045	wooden blade with perforations
A63B 2051/14	. Devices for stringing, { e.g. controlling the tension of the string during stringing }
A63B 2051/143	Hand-Held string-tensioning devices
A63B 2051/146	 Devices simultaneously raising and lowering alternate longitudinal strings previously mounted in a frame, to facilitate the threading of the crossstrings
A63B 2053/00	Golf clubs { (cleaning or maintenance $\underline{A63B\ 57/0087}$; measuring, verifying or correcting golf-club characteristics $\underline{A63B\ 59/0074}$; clubs or attachments on clubs for golf training $\underline{A63B\ 69/3632}$) }
A63B 2053/002	. Clubs made of composite, plastics or rubber materials, with integral head and shaft
A63B 2053/005	. Club sets
A63B 2053/02	. Joint structures between the head and the shaft
A63B 2053/021	the shaft axis being forwardly offset relative to the striking face of the head
A63B 2053/022	allowing adjustable positioning of the head with respect to the shaft
A63B 2053/023	adjustable angular orientation
A63B 2053/025	lie angle only, i.e. relative angular adjustment between the shaft and the club head about an axis parallel to the intended line of play when the club is in its normal address position
A63B 2053/026	loft angle only, i.e. relative angular adjustment between the shaft and the club head about a horizontal axis perpendicular to the intended line of play when the club is in its normal address position
A63B 2053/027	about the longitudinal axis of the shaft only
A63B 2053/028	with a range of alternative attachment points for the shaft
A63B 2053/04	. Heads

A63B 2053/0404	•••
A63B 2053/0408	with defined dimensions
A63B 2053/0412	Volume
A63B 2053/0416	Heads with an impact surface provided by a face insert
A63B 2053/042	the face insert consisting of a material different from that of the head
A63B 2053/0425	the face insert comprising two or more different materials
A63B 2053/0429	the face insert comprising two or more layers of material
A63B 2053/0433	with special sole configurations
A63B 2053/0437	with special crown configurations
	WARNING
	not complete, pending the completion of a reclassification
A63B 2053/0441	with visual indicators for aligning the golf club
A63B 2053/0445	Details of grooves or the like on impact surface
A63B 2053/045	Strengthening ribs
A63B 2053/0454	Strengthening ribs on the rear surface of the impact face plate
A63B 2053/0458	with non-uniform thickness of the impact face plate
A63B 2053/0462	characterised by tapering thickness of the impact face plate
A63B 2053/047	{ iron-type }
A63B 2053/0479	Wedge-type clubs, details thereof
A63B 2053/0483	Chipping clubs, details thereof
A63B 2053/0491	with added weights, e.g. changeable, replaceable
A63B 2053/0495	moving on impact, slidable, spring or otherwise elastically biassed
A63B 2055/00	Bags for golf clubs Stands for golf clubs for use on the course
A63B 2055/001	. Warning devices for indicating missing golf clubs
A63B 2055/002	. Security means for locking golf clubs in the bag
A63B 2055/08	 Wheeled carriers for golf bags (running gear or propulsion features <u>B60</u>; { insofar as the features therof are generic to hand carts <u>B62B</u> })
A63B 2055/081	Caddies fitted with means for sitting
A63B 2055/082	Means for mounting weather shields, e.g. umbrellas, on caddies
A63B 2055/083	with means for trailing the caddy other than by hand
A63B 2055/085	by mechanical links attached to the golf players
A63B 2055/086	by remote control
A63B 2055/087	{ motorised }
A63B 2055/088	Units for converting manually-driven golf carts into motorisedones
A63B 2057/00	Golf game accessories, e.g. golf cups, golf tees

A63B 2057/0018 { Tees; Tee-holders; Devices for inserting or extracting tees } A63B 2057/0025 With adjustable height A63B 2057/0087 { Cleaning or maintenance of golf-clubs, putters, shoes or other golf accessories (cleaning balls A63B 47/04; cleaning grips A63B 59/0062; cleaning footwear in general A47L 23/00) A63B 2057/0093 Means for heating or drying golf clubs A63B 2059/00 Bats, rackets, or the like, for other games (bats with a ball tethered thereto A63B 67/20); { Hand-held throwing or catching aids; Details or accessories of bats, rackets or the like, not limited to one of the groups A63B 49/00 to A63B 57/00, or not otherwise provided for } **WARNING** Groups A63B 59/0025 to A63B 59/0012, A63B 59/00 R, A63B 59/00 V, A63B 59/00 T, A63B 59/0096 are not complete pending a reclassification. See also this group, its subgroups and other groups of A63B A63B 2059/0003 Resonance frequency related characteristics A63B 2059/0007 Striking surfaces coated with high-friction abrasive material A63B 2059/0011 . having special surfaces reducing air resistance A63B 2059/0014 { Handles or grips (A63B 49/08 takes precedence) } A63B 2059/0018 Devices measuring hand characteristics to determine correct grip size A63B 2059/0022 Means for indicating or measuring the pressure on the grip A63B 2059/0081 Substantially flexible shafts, hinged shafts A63B 2059/0085 Telescopic shafts A63B 2059/06 for baseball, rounders, or similar games A63B 2059/065 with a continuously tapered barrel A63B 2061/00 Tennis nets or accessories for tennis or like games, { e.g. volley-ball (devices for holding or carrying balls A63B 47/00; for table tennis A63B 67/04) A63B 2061/02 **Posts** Revolvably-mounted posts; { Straining or adjusting devices on the posts, e.g. coin- or time operated } A63B 2061/025 electrically driven

Targets or goals for ball games (golf cups A63B 57/00)

Targets or goals with ball-returning means

A63B 2063/00

A63B 2063/001

A63B 2063/002	. variable in size
A63B 2063/004 A63B 2063/005	{ Goals of the type used for football, handball, hockey or the like }having means not protruding from the profile of the post for attachment of a net
A63B 2063/006	. Forming a target or goal by fixing net or target area to garage doorway or garage parts
A63B 2063/06 A63B 2063/065	 Revolving targets; { Moving targets, e.g. moving or revolving on impact } movable or switchable between discrete positions, e.g. after a successful shot
A63B 2063/08	with { substantially } horizontal opening for ball, e.g. for basketball { (<u>A63B 57/0056</u> , <u>A63B 63/06</u> take precedence) }
A63B 2063/083	{ for basketball }
A63B 2063/086	deflectable under excessive loads
A63B 2067/00	Miscellaneous sporting games
A63B 2067/002	. { Games using balls, not otherwise provided for }
A63B 2067/005	Games similar to volleyball or basketball and played on trampolines or the like, e.g.
7.002 200.7000	"Spaceball" or "Aeroball"
A63B 2067/02	 Special golf games, e.g. miniature golf, { e.g. golf putting games played on putting tracks; putting practice apparatus having an elongated platform as a putting track (mats for golf practice <u>A63B 69/3661</u>) }
A63B 2067/025	 with incorporated means acting on the track surface for varying its topography, e.g. slope
A63B 2067/06	 Ring or disc tossing games, { e.g. quoits; Throwing or tossing games, e.g. using balls; Games for manually rolling balls, e.g. marbles }
A63B 2067/061	Means to mark out tossing area
A63B 2067/063	tossing, e.g. rings or horseshoes around or on, e.g posts, hooks
A63B 2067/065	 used tossed devices of different sizes giving different degrees of difficulty for fitting in or over a target
A63B 2067/14	Curling stone Shuffleboard Similar sliding games
A63B 2067/142	with braking means
A63B 2067/144	variable
A63B 2067/146	Stones with rolling elements
	3 • • • • • • • • • • • • • • • • • • •
A63B 2067/16	. Tethered aerial top or spinner games, { i.e. diabolo games }
A63B 2067/163	Details (Not used)
A63B 2067/166	the diabolo being able to rotate freely in one direction only, e.g. fitted with an over-running clutch

Training appliances or apparatus for special sports (training of parachutists B64D

A63B 2069/00

<u>23/00</u>)

A63B 2069/0002	. { for baseball }
A63B 2069/0004	specially adapted for particular training aspects
A63B 2069/0006	for pitching
A63B 2069/0008	for batting
A63B 2069/0011	Catching
A63B 2069/0028	. { for running, jogging or speed-walking (movable endless bands A63B 22/02) }
A63B 2069/0031	Speed-walking
A63B 2069/0033	Nordic walking, i.e. using poles for walking
A63B 2069/0037	safety devices, eg. warning bells, rear-view mirrors
A63B 2069/004	. { for the martial arts, e.g. karate, judo (A63B 69/20 , A63B 69/34 take precedence) }
A63B 2069/0042	Breaking boards or holders therefore, i.e. devices for destroying exercises
A63B 2069/0044	Fake or disarmed practise weapons, i.e. for mimicking combat situations
A63B 2069/0051	. { not used, see subgroups and A63B 69/00 }
A63B 2069/0053	{ Apparatus generating random stimulus signals for reaction-time training involving a substantial physical effort (testing reaction time <u>A61B 5/162</u> ; reaction-time games <u>A63F 9/0096</u>) }
A63B 2069/0055	with means for distracting the user, e.g. visual or audio means
A63B 2069/0057	{ Means for physically limiting movements of body parts (<u>A63B 23/0211</u> takes precedence) }
A63B 2069/0062	Leg restraining devices
A63B 2069/0073	• { Means for releasably holding a ball in position; Balls constrained to move around a fixed point, e.g. by tethering (not used, see subgroups and A63B 69/00) }
A63B 2069/0077	Suspending a ball on an upright stream of air or water
A63B 2069/0082	with movement of the cord-attachment along its rotational axis as a function of the number of revolutions, e.g. following a helicalmember
A63B 2069/02	 for fencing, { e.g. means for indicating hits (fencing foils, sabres or epees <u>F41B 13/02</u>) }
A63B 2069/025	with conductive floor used as part of the detection circuit
A63B 2069/06	. for rowing or sculling
A63B 2069/062	by pulling on a cable
A63B 2069/064	with pivoting handlebars
A63B 2069/066	with handlebars rotating about a horizontal axis
A63B 2069/068	kayaking, canoeing
A63B 2069/16	. for cycling, { i.e. arrangements on or for real bicycles (home-trainers A63B 23/0476) }
A63B 2069/161	supports for the front of the bicycle
A63B 2069/162	for front fork or handlebar

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A63B 2069/163
                               for the front wheel
A63B 2069/164
                            supports for the rear of the bicycle, e.g. for the rear forks
                      . .
A63B 2069/165
                               rear wheel hub supports
A63B 2069/166
                            supports for the central frame of the bicycle, e.g. for the crank axle housing, seat
                            tube or horizontal tube
A63B 2069/167
                            on rollers without further support
A63B 2069/168
                            Force transfer through the rim of the wheel
A63B 2069/18
                         for skiing
A63B 2069/185
                            for ski-jumping
A63B 2069/36
                         for golf
A63B 2069/3602
                            Player's game information devices (not used)
A63B 2069/3605
                               Golf club selection aids informing player of his average or expected shot
                               distance for each club
A63B 2069/3611
                            { not used, see 69/36 and subgroups }
                               { Striking surfaces with impact indicating means, e.g. markers }
A63B 2069/3617
A63B 2069/362
                                  electrical or electronic
A63B 2069/3623
                            { for driving ( A63B 69/3608 , A63B 69/3658 , A63B 69/3661 , A63B 69/3667 and
                            A63B 69/3691 take precedence ) }
A63B 2069/3626
                               Details (not used)
                      . . .
A63B 2069/3629
                                  Visual means not attached to the body for positioning the trainee's head or
                      . . . .
                                  for detecting head movement, e.g. by parallax
A63B 2069/3661
                            { Mats for golf practice, e.g. mats having a simulated turf, a practice tee or a green
                            area }
A63B 2069/3664
                               with bristles, the length of which can be adjusted
A63B 2069/3667
                            { Golf stance aids, e.g. means for positioning a golfer's feet }
A63B 2069/367
                               Detection of balance between both feet, i.e. weight distribution
                      . . .
                            { for putting ( A63B 69/3608 , A63B 69/3661 , A63B 69/3667 and A63B 69/3697
A63B 2069/3676
                            take precedence)}
A63B 2069/3679
                               Details (not used)
A63B 2069/3682
                                  Visual means not attached to the body for positioning the trainee's head or
                                  for detecting head movement, e.g. by parallax
A63B 2069/40
                         Stationarily-arranged devices for projecting balls { or other bodies ( ball-dispensing
                         devices A63B 47/002; golf cups with ball ejector means A63B 57/0062; targets with
                         means for returning balls by gravity or mechanically A63B 63/00 ) }; ( sling weapons
                         F41B 3/00; traps for clay-pigeon targets F41J 9/18)
                            substantially vertically, e.g. for baseball
A63B 2069/401
A63B 2069/402
                            giving spin
A63B 2069/403
                               back or reverse spin
A63B 2069/404
                               side spin
A63B 2069/405
                               top spin
A63B 2071/00
                      Games or sports accessories not covered in groups A63B 1/00 to A63B 69/00 (
                      starting appliances A63K 3/02)
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A63B 2071/0009	. { for handicapped persons }
A63B 2071/0018	for wheelchair users
A63B 2071/0027	visually handicapped
A63B 2071/0054	• { Features for injury prevention on an apparatus, e.g. shock absorbers (mats or the like for absorbing shocks for jumping A63B 6/00) }
A63B 2071/0063	Shock absorbers
A63B 2071/0072	Limiting the applied force, torque, movement or speed
A63B 2071/0081	Stopping the operation of the apparatus
A63B 2071/009	Protective housings covering the working parts of the apparatus
A63B 2071/02	. for large-room or outdoor sporting games
A63B 2071/023	{ Supports, e.g. poles }
A63B 2071/024	with screws or pins in the earth
A63B 2071/025	on rollers or wheels
A63B 2071/026	stabilised by weight
A63B 2071/027	using player's own weight, e.g. on a platform
7,000 207 17027	trr adding player of emit mongrit, engineer a platform
A63B 2071/06	. Indicating or scoring devices for games or players, { or for other sports activities }
A63B 2071/0602	Non-electronic means therefor
A63B 2071/0605	{ Decision makers and devices using detection means facilitating arbitration }
A63B 2071/0611	Automatic tennis linesmen, i.e. in-out detectors
A63B 2071/0613	Automatic net-fault detectors
A63B 2071/0619	{ Displays, user interfaces and indicating devices, specially adapted for sport equipment, e.g. display mounted on treadmills }
A63B 2071/0622	{ Visual, audio or audio-visual systems for entertaining, instructing or motivating the user }
A63B 2071/0625	Emitting sound, noise or music
A63B 2071/0627	when used improperly, e.g. by giving a warning
A63B 2071/063	Spoken or verbal instructions
A63B 2071/0633	without electronic means
A63B 2071/0636	3D visualisation
A63B 2071/0638	Displaying moving images of recorded environment, e.g. virtual environment
A63B 2071/0641	with a marker advancing in function of the exercise
A63B 2071/0644	with display speed of moving landscape controlled by the user's performance
A63B 2071/0647	Visualisation of executed movements
A63B 2071/065	Visualisation of specific exercise parameters
A63B 2071/0652	Visualisation or indication relating to symmetrical exercise, e.g. right-left performance related to spinal column
A63B 2071/0655	Tactile feedback
A63B 2071/0658	Position or arrangement of display
A63B 2071/0661	arranged on the user
A63B 2071/0663	worn on the wrist, e.g. wrist bands

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A63B 2071/0666
                                     worn on the head or face, e.g. combined with goggles or glasses
A63B 2071/0675
                            Input for modifying training controls during workout
A63B 2071/0677
                               Input by image recognition, e.g. video signals
A63B 2071/068
                               Input by voice recognition
                      - - -
A63B 2071/0683
                               Input by handheld remote control
                     . . .
A63B 2071/0686
                            { Timers, rhythm indicators or pacing apparatus using electric or electronic means }
                     . .
A63B 2071/0688
                               using non-electronic means, e.g. mechanical, visual, acoustic or tactile means
                      . . .
A63B 2071/0691
                            Maps, e.g. yardage maps or electronic maps
                      . .
A63B 2071/0694
                            Visual indication, e.g. Indicia
                      . .
A63B 2071/08
                         Body-protectors for players or sportsmen, { i.e. body-protecting accessories affording
                         protection of body parts against blows or collisions } ( protective clothing or garments
                         for sporting purposes A41D 13/00)
                            { fluid-filled, e.g. air-filled }
A63B 2071/081
A63B 2071/083
                               using bubble wrap
                      . . .
A63B 2071/085
                            { Mouth or teeth protectors ( A63B 71/081 takes precedence; protective face
                      . .
                            masks <u>A41D 13/00</u>)}
                               Mouth inserted protectors with breathing holes
A63B 2071/086
A63B 2071/088
                               Mouth inserted protectors with tether or strap
                      . . .
                            for the head ( { A63B 71/081 takes precedence } ; in the form of caps or hats A42B
A63B 2071/10
                      . .
                            1/08; helmets A42B 3/00)
A63B 2071/105
                               Fencing mask
                      . . .
A63B 2071/12
                            for the body, { e.g. shoulders } , or the legs { ( A63B 71/081 takes precedence ) }
A63B 2071/1208
                               for the breast and the abdomen, e.g. breast plates
A63B 2071/1225
                               { for the legs, e.g. thighs, knees, ankles, feet (bandages, e.g. orthesis-like
                               supports or braces A61F 5/0102; for strengthening joints A61F 13/06)
A63B 2071/1233
                                  for the hip
A63B 2071/1241
                                  for the thigh
A63B 2071/125
                                  for the knee
A63B 2071/1258
                                  for the shin, e.g. shin guards
A63B 2071/1266
                                  for the calf
                                  for the ankle
A63B 2071/1275
                     . . . .
A63B 2071/1283
                                  for the foot
                     . . . .
Guide heading:
A63B 2207/00
                      Exercising or sporting devices provided with means enabling use in the dark
A63B 2207/02
                         Powered illuminating means
Guide heading:
A63B 2208/00
                      Characteristics or parameters related to the user or player (not used) (measuring
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physical characteristics of the user A63B 2230/00)

A63B 2208/02 . posture A63B 2208/0204 Standing on the feet A63B 2208/0209 on a single foot . . . A63B 2208/0214 Kneeling . . A63B 2208/0219 on hands and knees A63B 2208/0223 Squatting A63B 2208/0228 Sitting on the buttocks A63B 2208/0233 in 90/90 position, like on a chair . . . A63B 2208/0238 with stretched legs, like on a bed . . . A63B 2208/0242 Lying down . . A63B 2208/0247 with legs in a kneeled 90/90 position . . . A63B 2208/0252 supine . . . A63B 2208/0257 prone . . . A63B 2208/0261 using trunk supports resisting forward motion of user A63B 2208/0266 on the side A63B 2208/0271 Standing on the shoulders or the neck A63B 2208/0276 Standing on the head A63B 2208/028 Standing on the hands A63B 2208/0285 Hanging . . A63B 2208/029 upright A63B 2208/0295 on hands and feet (for push-ups A63B 23/1236) . . A63B 2208/03 the user being in water A63B 2208/05 the user being at least partly surrounded by a pressure different from the atmospheric pressure (not used) A63B 2208/053 higher pressure A63B 2208/056 lower pressure . . A63B 2208/12 specially adapted for children A63B 2208/14 specially adapted for animals A63B 2209/00 Characteristics of used materials A63B 2209/02 with reinforcing fibres, e.g. carbon, polyamide fibres A63B 2209/023 Long, oriented fibres, e.g. wound filaments, woven fabrics, mats A63B 2209/026 Ratio fibres-total material A63B 2209/08 magnetic A63B 2209/10 with adhesive type surfaces, i.e. hook and loop-type fastener

A63B 2209/14	. with form or shape memory materials
A63B 2210/00	Space saving
A63B 2210/02	. incorporated in chairs
A63B 2210/04	. incorporated in beds, sofas
A63B 2210/06	. incorporated in cabinets
A63B 2210/10	. specially constructed to fit in the corner of a room
A63B 2210/50	. Size reducing arrangements for stowing or transport
A63B 2210/52	Frame members linked by elastic means when disassembled
A63B 2210/54	Foldable elastic frame members automatically resuming their expanded state when released
A63B 2210/56	electrically folded and erected
A63B 2210/58	slideably retracted in a housing when not in use
A63B 2213/00	Exercising combined with therapy
A63B 2213/001	. with radiation therapy
A63B 2213/002	Infra-red
A63B 2213/003	Ultra-violet
A63B 2213/004	. with electrotherapy
A63B 2213/005	. with respiratory gas delivering means, e.g. O2
A63B 2213/006	under hypoxy conditions, i.e. oxygen supply subnormal
A63B 2213/007	. combined with magnetotherapy
A63B 2213/008	. combined with ultrasound therapy
A63B 2220/00	Measuring of physical parameters relating to sporting activity
	NOTE .
	When classifying in this group, the purpose of the measurement takes precedence over the measuring method or device
A63B 2220/05	. Image processing for measuring physical parameters
A63B 2220/10	. Positions
A63B 2220/12	Absolute positions, e.g. by using GPS
A63B 2220/13	Relative positions

A63B 2220/14 Geo-tagging, e.g. for correlating route or track location data with specific information related to that specific location A63B 2220/16 Angular positions A63B 2220/17 Counting, e.g. counting periodical movements, revolutions or cycles, or including further data processing to determine distances or speed A63B 2220/18 Inclination, slope or curvature A63B 2220/20 Distances or displacements A63B 2220/22 Stride length A63B 2220/24 Angular displacement A63B 2220/30 Speed Relative speed A63B 2220/31 A63B 2220/34 Angular speed A63B 2220/35 Spin . . . A63B 2220/36 Speed measurement by electric or magnetic parameters . . A63B 2220/40 Acceleration A63B 2220/44 Angular acceleration A63B 2220/50 Force related parameters A63B 2220/51 Force A63B 2220/52 Weight, e.g. weight distribution . . . A63B 2220/53 Force of an impact, e.g. blow or punch A63B 2220/54 Torque A63B 2220/56 Pressure A63B 2220/58 Measurement of force related parameters by electric or magnetic means A63B 2220/62 Time or time measurement used for time reference, time stamp, master time or clock signal A63B 2220/64 Frequency, e.g. of vibration oscillation A63B 2220/70 Measuring or simulating ambient conditions, e.g. weather, terrain or surface conditions A63B 2220/72 **Temperature** A63B 2220/73 Altitude A63B 2220/74 Atmospheric pressure A63B 2220/75 Humidity . . A63B 2220/76 Wind conditions . . A63B 2220/78 Surface covering conditions, e.g. of a road surface A63B 2220/80 Special sensors, transducers or devices therefor A63B 2220/801 Contact switches A63B 2220/802 Ultra-sound sensors

A63B 2220/803 Motion sensors A63B 2220/805 Optical or opto-electronic sensors . . A63B 2220/806 Video cameras A63B 2220/807 Photo cameras A63B 2220/808 Microphones A63B 2220/83 characterised by the position of the sensor A63B 2220/833 Sensors arranged on the exercise apparatus or sports implement . . . A63B 2220/836 Sensors arranged on the body of the user A63B 2220/89 Field sensors, e.g. radar systems . . A63B 2225/00 Other characteristics of sports equipment A63B 2225/01 Special aerodynamic features, e.g. airfoil shapes, wings or air passages Testing, calibrating or measuring of equipment A63B 2225/02 A63B 2225/05 with suction cups A63B 2225/055 used for fixing A63B 2225/08 with writing point A63B 2225/09 Adjustable dimensions A63B 2225/093 Height A63B 2225/096 automatically adjusted according to anthropometric data of the user Multi-station exercising machines A63B 2225/10 A63B 2225/102 having a common resisting device A63B 2225/105 each station having its own resisting device, e.g. for training multiple users simultaneously A63B 2225/107 Resisting devices being of the same kind . . . A63B 2225/12 with mirrors A63B 2225/15 with identification means that can be read by electronic means A63B 2225/20 with means for remote communication, e.g. internet or the like A63B 2225/30 Maintenance A63B 2225/305 Remote servicing A63B 2225/50 Wireless data transmission, e.g. by radio transmitters or telemetry A63B 2225/52 modulated by measured values A63B 2225/54 Transponders, e.g. RFID A63B 2225/60 Apparatus used in water A63B 2225/605 Floating

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Inflatable
A63B 2225/62
A63B 2225/64
                        Heated
A63B 2225/66
                        Cooled
A63B 2225/68
                        Apparatus or equipment provided with article holders, e.g. keys, wallets, books
A63B 2225/682
                           for beverages
A63B 2225/685
                           for electronic devices, e.g. phone, PDA, GPS device, notebook
A63B 2225/687
                           for others, e.g. keys, wallets, books
A63B 2225/70
                        Coin-operated
A63B 2225/72
                        Means preventing unauthorised use, e.g. by lowering a tennis net
A63B 2230/00
                     Measuring physiological parameters of the user
A63B 2230/01
                        User's weight
A63B 2230/015
                           used as a control parameter for the apparatus
                        heartbeat characteristics, e.g. E.G.C., blood pressure modulations
A63B 2230/04
A63B 2230/045
                           used as a control parameter for the apparatus
A63B 2230/06
                           heartbeat rate only
A63B 2230/062
                              used as a control parameter for the apparatus
A63B 2230/065
                              within a certain range
A63B 2230/067
                                 used as a control parameter for the apparatus
                     . . . .
A63B 2230/08
                        other bio-electrical signals
A63B 2230/085
                           used as a control parameter for the apparatus
A63B 2230/10
                           electroencephalographic signals
                              used as a control parameter for the apparatus
A63B 2230/105
                     . . .
                        blood composition characteristics
A63B 2230/20
A63B 2230/201
                           used as a control parameter for the apparatus
A63B 2230/202
                           glucose
                     . .
A63B 2230/203
                              used as a control parameter for the apparatus
A63B 2230/205
                           P-CO2, i.e. partial CO2 value
A63B 2230/206
                              used as a control parameter for the apparatus
                     . . .
A63B 2230/207
                           P-O2, i.e. partial O2 value
                     . .
A63B 2230/208
                     . . .
                              used as a control parameter for the apparatus
A63B 2230/30

    blood pressure (A63B 2230/04 takes precedence)

A63B 2230/305
                           used as a control parameter for the apparatus ( A63B 2230/045 takes precedence
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A63B 2230/40	respiratory characteristics
A63B 2230/405	used as a control parameter for the apparatus
A63B 2230/42	rate
A63B 2230/425	used as a control parameter for the apparatus
A63B 2230/43	Composition of exhaled air
A63B 2230/431	used as a control parameter for the apparatus
A63B 2230/433	partial CO2 value
A63B 2230/435	used as a control parameter for the apparatus
A63B 2230/436	partial O2 value
A63B 2230/438	used as a control parameter for the apparatus
A63B 2230/50	. temperature
A63B 2230/505	used as a control parameter for the apparatus
A63B 2230/60	. muscle strain, i.e. measured on the user
A63B 2230/605	used as a control parameter for the apparatus
A63B 2230/62	. posture
A63B 2230/625	used as a control parameter for the apparatus
A63B 2230/65	skin conductivity
A63B 2230/655	used as a control parameter for the apparatus
A63B 2230/70	. body fat
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A63B 2230/705	used as a control parameter for the apparatus
A63B 2230/75	calorie expenditure
A63B 2230/755	used as a control parameter for the apparatus
A63B 2243/00	Specific ball sports
A63B 2243/0004	Baseball, softball, rounders
A63B 2243/0008	Softball
A63B 2243/0012	Rounders
A63B 2243/0016	. Cricket
A63B 2243/002	. Billiards
A63B 2243/0025	. Football (American football A63B 2243/007)
A63B 2243/0029	. Golf
A63B 2243/0033	. Handball
A63B 2243/0037	. Basketball

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A63B 2243/0041
                       Hockey
A63B 2243/0045
                          Ice hockey
A63B 2243/005
                       Lacrosse
A63B 2243/0054
                       Bowling, i.e. ten-pin bowling
A63B 2243/0058
                       Bowls, crown green bowling
A63B 2243/0062
                       Petanque
A63B 2243/0066
                       Rugby
                       American football
A63B 2243/007
                          American football
A63B 2243/0075
                       Squash, racketball
A63B 2243/0079
                          Racketball
A63B 2243/0083
                       Tennis
A63B 2243/0087
                          Badminton
A63B 2243/0091
                       Table-tennis
A63B 2243/0095
                       Volleyball
A63B 2244/00
                    Sports without balls (not used)
A63B 2244/03
                       Skeet, clay pigeon shooting
A63B 2244/04
                       Bow shooting
A63B 2244/08
                       Jumping, vaulting
A63B 2244/081
                          High jumping
A63B 2244/082
                          Long jumping
A63B 2244/084
                             Triple jump
A63B 2244/085
                          Pole vaulting
                    . .
A63B 2244/087
                          without take off run
                    . .
A63B 2244/088
                          hurdling
A63B 2244/09
                       Weight-lifting
A63B 2244/10
                       Combat sports (Rugby, American football A63B 2243/0066)
A63B 2244/102
                          Boxing
A63B 2244/104
                          Judo
A63B 2244/106
                          Karate
                          Wrestling
A63B 2244/108
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A63B 2244/12 . Acrobats

A63B 2244/14 . Shot putting

A63B 2244/15 . Discus throwing

A63B 2244/16 . Spear or javelin throwing

A63B 2244/17 . Hammer throwing

A63B 2244/18 . Skating

A63B 2244/183 .. Artistic or figure skating

A63B 2244/186 .. Roller skating

A63B 2244/19 . Skiing

A63B 2244/203 . Swimming
A63B 2244/203 ... Diving
A63B 2244/206 ... artistic

A63B 2244/22 . Dancing

A63B 2244/225 .. Pole dancing

A63B 2244/24 . Horse riding

A63B 2244/26 . Bob-sleigh